

Stack

OF THE
UNIVERSITY OF ILLINOIS
20 NOV 1914

ESTABLISHED 1848



Registered in
U. S. Pat. Office

GILMAN'S RURAL WORLD.

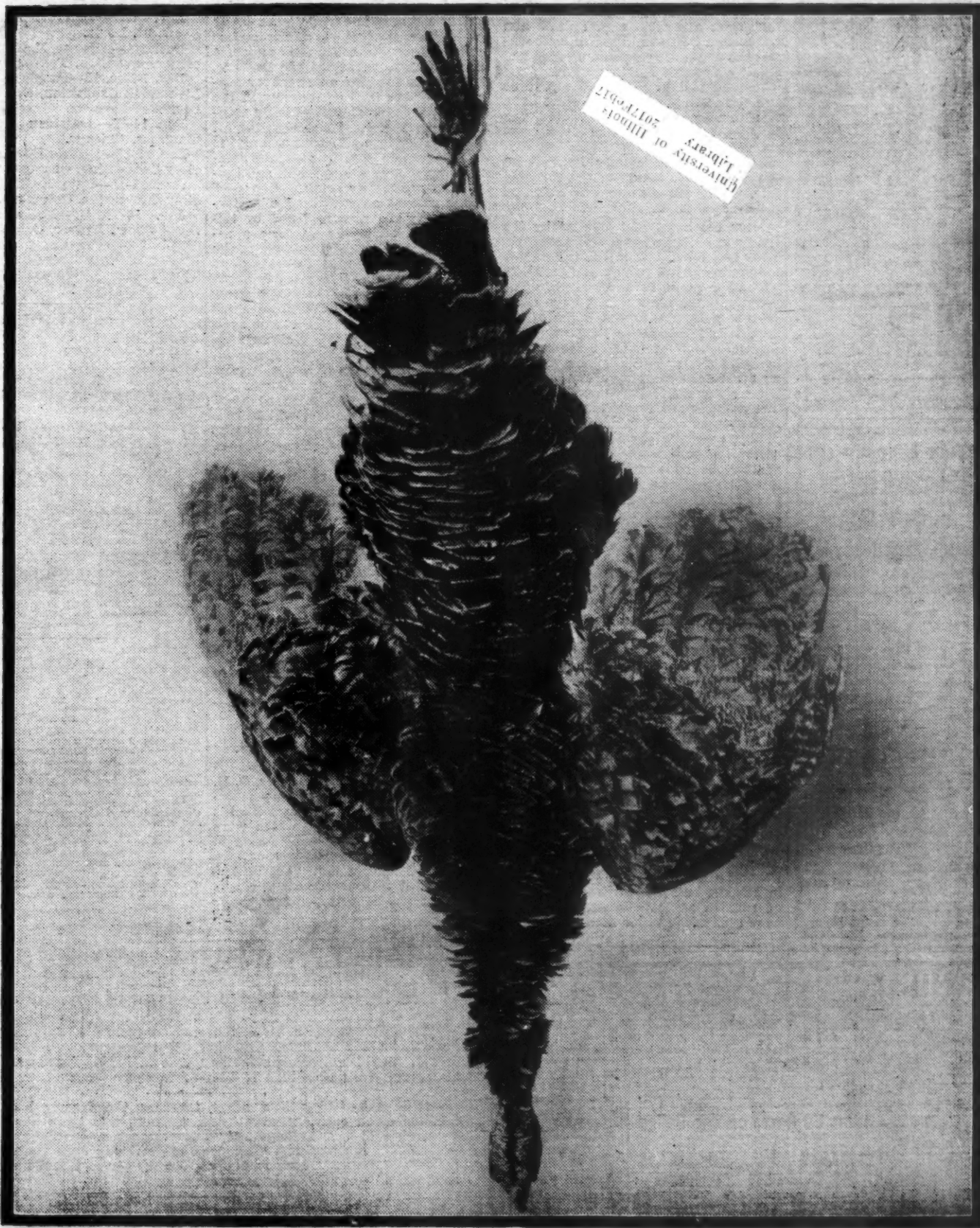
DEVOTED TO AGRICULTURE HORTICULTURE HORSES CATTLE SHEEP SWINE ETC.

OLDEST AGRICULTURAL AND LIVE STOCK JOURNAL IN THE MISSISSIPPI VALLEY

Sixty-Seventh Year.

ST. LOUIS, MO., NOVEMBER 19, 1914.

Volume LXVII. No. 47.



Lowest Prices Ever Made on World's Best Roofing

Once you have laid Edwards Tightcote Galvanized Steel Roofing your roofing expense for that building is at an end. Its cost per square is the lowest ever made. It has no upkeep cost. Always beautiful in appearance. Reduces cost of fire insurance.

EDWARDS Exclusive Tightcote Process

Makes Rust-Proof Roofing. Edwards Metal Shingles, Metal Spanish Tile, Edwards Reo Steel Shingles, Grip-Lock Roofing, Pressed Standing Seam or Roll Roofing, Ceiling, Siding, etc. Not the space of a pin-point on steel is exposed to weather.

How to Test Galvanizing

Take any other galvanized steel, bend it back and forth several times, hammer it down each time. You will be able to flake off great scales of galvanizing with your finger nail. Apply this test to a piece of Edwards Tightcote Galvanized Steel Roofing—you'll find no flaking.

EDWARDS Patent Interlocking Device

Prevents Warping, Buckling or Breaking. Protects Nail Holes—nails are driven through under layer not exposed to weather. No special tools or experience needed to lay—anyone can do the work—lay over old shingles if you wish.

Reo Steel Shingles

Cost Less; Outwear 3 Ordinary Roofs. No matter what kind of a building you have in mind there is a style of EDWARDS Tightcote Galvanized Roofing exactly suited to your need. Lightning-proof, Fire-proof, Rust-proof, Rest-proof. Lasts as long as Building Stands.

GARAGE \$49.50

Lowest price ever made on Ready-Made Fire-Proof Steel Garages. Set up any place. Postal brings illustrated 64-page catalog.

FREIGHT PREPAID

Lowest Factory Prices. Greatest roofing proposition ever made. We sell direct to you and save you all in-between dealers' profits.

FREE Roofing Book

We simply ask the right to prove to you that our prices are lowest ever made for the World's Best Roofing. Post or Freight-Paid Prices and World's companion brings Free Samples, Prices and Roofing Book No. 11956. NAME ADDRESS We are the Largest Makers of Sheet Metal Products in the World

The Edwards Manufacturing Co., 11345-11395 Pike St., Cincinnati, Ohio. Please send FREE samples. Post or Freight-Paid Prices and World's companion brings Free Samples, Prices and Roofing Book No. 11956.

You like to go Hunting Fishing Trapping

Then surely you will enjoy the National Sportsman Magazine with its 160 richly illustrated pages, full of overabundant information about guns, fishing tackle, camp-outfits—the best places to go for fish and game, and a thousand and one valuable "flow to" hints for Sportsmen. The National Sportsman is just like a big camp-fire in the woods where thousands of good fellows gather once a month and spin stirring yarns about their experiences with rod, dog, rifle and gun. All this for 15c a copy or \$1.00 for a whole year.

Special Offer

Mail us 25c in stamps or cash for a three months' trial subscription to the National Sportsman and we will send you FREE of Charge one of our handsome Ornate Gold watch fobs as here shown with Seal grain leather strap and gold plated buckle.

NATIONAL SPORTSMAN

137 Federal St. Boston, Mass.

WHAT OUR READERS THINK & DO

INTERESTING FACTS ABOUT IRELAND AND ITS PEOPLE.

Editor, Rural World:—Many years ago it was a common thing in the east to see traveling traders in small wares passing along the highway on foot and carrying great loads of goods for retail among rural people, but it is seldom of late years that we get sight of these old-time traders. The other day a traveling peddler of this kind approached my house for shelter from a rainstorm that was near, and I had quite a lengthy conversation with him, and as I always try to get and give information at such times, I drew him out as to conditions in his native country, the north of Ireland, where he had a large family residing, and from whom he had been absent a year or two, but was expecting to start on a visit to them next day. He was a fine looking, intelligent, well preserved man of some 75 years. I think he said his home was in county Donegal on the northwest coast of the Emerald Isle, where the scenery was wild and picturesque in the extreme.

Near his home and washed by the sea waves was a conical mountain 1,600 feet high, and on the top of this mountain there was a natural lake which covered several acres. The heather plant grew wild on the sides of the mountain to the height of six feet, and in this dense jungle the cattle and sheep of the neighborhood browsed winter and summer, and got no other feed the year around, except when snow and ice were on the plants. The animals made winding paths four feet wide as they ascended the heights of this romantic pasture field. Small springs of good water were numerous against the sides of the mountain. I think the pasture was free to the poor peasants in the vicinity, but am not sure. The heather plant was used extensively for home-made brooms, and sometimes merchants would buy them to sell. At the close of each day the boys and girls around the elevation would ascend up towards the clouds in quest of the browsing bovines, and sometimes it was quite difficult to find them.

I was always deeply interested in regard to those old European castles that were built in mediaval ages, many of which have long since been naught but splendid ruins. Mr. Cunningham, the venerable peddler, informed me that there were two of these ancient structures in Donegal county, both of them in ruins, and probably no one knows how long they have been in this condition, nor when they were first erected. My informant stated that they were probably 1,000 years old, but that is only guesswork. These colossal edifices at the present time are some 30 or 40 feet in heights, but, judging from the mass of rubbish at their bases, they must have been much taller than this before

the crumbling process began. The walls of one of these old buildings are covered with wild ivy, making it appear very pretty to the eye of the tourist observer.

Undoubtedly many of the old European castles were built in days long anterior to the time of the renowned warrior, Charlemagne. It would be very interesting if we knew more of the history of those old castles and round towers of Ireland and other countries across the big waters. No doubt many fierce conflicts took place in feudal times among rival clans and factions at such historic spots, but my friend, the peddler, could give me but little information upon the subject.

As to agriculture, I learned that Ireland was in a very backward state, and that much of the land was farmed in small patches by tenants who were burdened by rents, taxes, and tithes, and for fear their rent would be raised they were slow in making improvements and in fertilizing the land. Cast-iron or decayed seaweed was the main fertilizer. Much of the ground is spaded up by hand to the depth of a foot or more, oats and potatoes being the main crops. Much of the soil is deficient in quality, but the moisture of the climate preserves the herbage, and renders the land excellent for pasturing. There is much poverty in the country, yet almost every family manages to keep at least one cow, but all of the butter in most cases among the renters goes to pay the rent, the family only getting the skim-milk and buttermilk, which they drink.

Ireland was once covered with forests which are now replaced by immense peat bogs. These form a remarkable feature, characteristic of the country. The peat in these bogs is often as much as 15 feet in depth, affording immense quantities of fuel for the people. There are 3,000,000 acres of these bogs in the island. For agricultural purposes they are almost valueless, as they produce nothing but heath-bog myrtle and sedge grass. From the depths of these bogs are sometimes taken quantities of wood in complete preservation, which indicate, that these bogs are the remains of the ancient forests. The skins of men and animals have sometimes been found in the depths of these bogs transformed into a sort of leather by the tanning matter, which the moisture contains.

When Mr. Cunningham first came to our country he was greatly surprised at the extravagance of our people, and their carelessness in regard to economy, stating that his countrymen never bought anything unless it was absolutely necessary that they should do so, as they had learned by long years of experience that the practice of the strictest economy was necessary in many homes in order that a reasonable degree of comfort might be enjoyed. J. M. Miller, Missouri.

OAT SMUT AND OAT YIELDS.

In Gage county, Nebraska, Mr. O. H. Liebers has secured some very interesting results in connection with his oat smut demonstrations, which were carried on on more than 50 farms in his county during the past season. In one 31-acre field, a test plot of 4.19 acres seeded with untreated seed gave a yield of 36.3 bushels per acre, while

the remaining 26.94 acres or the field where the seed oats were treated with formaldehyde solution gave a yield of 53.02 bushels per acre, a difference of 17 bushels per acre in favor of the treated seed. Other test fields in the county promise equally as startling results.

Mr. Liebers made a large number of counts in different fields which showed from 4 to 12½ per cent of smutted heads, and this condition existed without farmers being aware that there was any smut in his oats, owing to the smutted heads being much shorter stalks than the healthy ones.

This county raises annually 50,000 acres of oats and if the formaldehyde treatment would add proportionately to the yield on all these acres, it would increase oat yield of the county nearly a million bushels.

COMING EVENTS.

Nov. 11-21—National Grange Convention, Wilmington, Del.

Nov. 16-Nov. 21—Arkansas State Fair, Hot Springs.

Nov. 24-29—Missouri State Poultry Show, St. Louis.

Dec. 2-4—Kansas Horticultural Society Convention, Topeka.

Dec. 7-Dec. 12—Pacific International Live Stock Exposition, North Portland, Ore.

Dec. 14-18—American Good Roads Congress, Chicago.

Dec. 15-17—Illinois Horticultural Society Convention, Champaign.

Jan. 11-15—Ohio Horticultural Society Convention, Columbus.

Jan. 18-23, '15—National Western Stock Show, Denver, Colo.

Feb. 1-6—Corn and Clover Convention—Midwinter Fair—North Dakota Live Stock Breeders' Association, Grand Forks, N. D.

Recent experiments indicate that round timbers of all the pines, of Engelmann spruce, Douglas fir, tamarack and western larch, can be readily treated with preservatives, but that the firs, hemlocks, redwood, and Sitka spruce, in the round, do not take treatment easily. This information should be of value to persons who contemplate preservative treatment of round posts, poles or mine props.

BARN PLANS.

If you intend to remodel or rebuild your barn or to build new, you will be interested in barn plans. The Loudon Machinery Co., Fairfield, Iowa, publish a dollar book on barn plans. We have arranged with them to send a copy free to Colman's Rural World paid-up subscribers who intend to build or remodel their barns. You must write to them direct—not to us—and say you are a paid-up subscriber to Colman's Rural World and that you want their barn book. You will then get the dollar book free.

Red Crown shows remarkable test. Judged by C. A. C. Committee. Surprising results were obtained recently in Chicago, when in a distance test on the boulevards, a 1913 big six went 28.7 miles on a gallon of Red Crown gasoline. The test was made to demonstrate the fuel economy of high test gasoline, by the technical committee of the Chicago Automobile Club. Red Crown gasoline, 11 test, was decided upon by the judges and drivers as the best gasoline to be used. All through the trip the clutch was not slipped, except when traffic congestion made it necessary. The dash adjustment on the carburetor was disconnected, and in order that the test be a fair one, the fan was in operation throughout the run. Next came the acceleration test. With the carburetor adjustment the same as during the economy run, the car was driven from standing start for thirty miles an hour in 12.4-5 seconds. The flexibility test saw the car run at four miles an hour, then speeded up to forty-four. This test proves that the six is not an excessive fuel consumer, where the best gasoline is used.

25 YEARS AGO

In Colman's Rural World—Issue of Nov. 21, 1889

Palo Alto tried to break the stallion record of 2:12 this afternoon (Nov. 16) at Napa, Cal., but did not succeed. His time was 2:12½. Sunol trotted an exhibition mile in 2:15. Stamboul lowered his record, trotting a mile in 2:12¼.

It is astonishing how many teachers the farmer has in the columns of an ordinary newspaper; teachers who know about as little of his real surroundings and circumstances, of his fight with conditions that confront him "between the devil and deep water," as he does about them. These men think the farmer is a fool and can be hoodwinked forever. Bide-a-wee.

Persons having a superstitious dread of Friday will not be over and above pleased to hear that this is a year of Fridays. It came in on Friday, and goes out on Friday, and will have fifty-three ill-omened days. There are four months of the year that have five Fridays each; change of moon occurs five times on Friday; and the longest and shortest days of the year are Fridays.

New KEROSENE LIGHT BEATS ELECTRIC OR GASOLINE

10 Days FREE—Send No Money



We don't ask you to pay us a cent until you have used this wonderful modern light in your own home ten days, then you may return it at our expense if not perfectly satisfied. You can't possibly lose a cent. We want to prove to you that it makes an ordinary oil lamp look like a candle; beats electric, gasoline or acetylene. Lights and is put out like old oil lamp. Tests at 14 leading Universities show that it

Burns 50 Hours on One Gallon

common coal oil (kerosene), no odor, smoke or noise, simple, clean, won't explode. Three million people already enjoying this powerful, white, steady light, nearest to sunlight. Guaranteed.

\$1,000.00 Reward

will be given to the person who shows us an oil lamp equal to the new Aladdin in every way (details of offer given in our circular). Would we dare make such a challenge if there were the slightest doubt as to the merits of the Aladdin? GET ONE FREE. We want one user in each locality to whom we can refer customers. To that person we have a special introductory offer to make, under which one lamp is given free. Write quick for our 10-Day Absolutely Free Trial Proposition and learn how to get one free.

MANTLE LAMP COMPANY, 661 Aladdin Building, Chicago, Ill. Largest Manufacturers and Distributors of Kerosene Mantle Lamps in the World

Men With Rigs Make

\$100 to \$300 per mo. delivering

the ALADDIN on our

easy plan. No previous

experience necessary.

Practically every farm

home and small town

home will buy after

trying. One farmer who

had never sold anything

in his life before writes:

"I sold 51 lamps the first

evening. Another

says: "I disposed of 34

lamps out of 51 calls."

Thousands who are seeing

money endorse the Alad-

din just as strongly.

No Money Required

We furnish capital to

able men to get started.

Ask for our distributor's

plan, and learn how to

make big money in un-

equaled territory.

COLMAN'S RURAL WORLD

Vol. 67. No. 47.

ST. LOUIS, MO., NOVEMBER 19, 1914.

WEEKLY.

The Big Feature of Thanksgiving Day

Is the Dinner of Turkey, Goose or Chicken, With Pumpkin Pie===Like Mother Alone Knows Best How to Prepare===This Article Will Show the Way.

By Sarah Martha Nemire, Iowa.

PREPARATIONS for a successful Thanksgiving dinner should be made in advance. It is true that the dinner is the best part of the day; but if the turkey or goose which forms the center of the bill-of-fare happens to be tough, or not prepared properly, the pleasure of eating the dinner will be diminished. A tough turkey or goose is not desirable. For this reason the Thanksgiving fowls should take a course of treatment before the day arrives.

The quickest and easiest method of fattening turkeys and geese is to pen them up and feed all the fattening food they will eat. Geese and turkeys roam about most of the day when they are at liberty; muscular exercise makes them healthy, but has a tendency to harden and toughen their bodies. The flocks of geese and turkeys should be confined in clean pens, constructed of common poultry netting. If the turkeys or geese fly out trim the feathers from their wings.

Corn should form the bulk of the fattening ration. Corn will fatten geese and turkeys quicker than any other feed. Shorts and oil meal, mixed with milk, makes a good feed. Usually corn should not be fed alone. The birds will take on more flesh and keep in better condition if they receive a balanced ration. The wild turkey, as illustrated on the front cover this issue of the Rural World, was famous for its plump body and delicious taste; the balanced ration the wild bird picked up was largely responsible for its tender flesh and delectable taste. Feeding tame fowls a balanced ration of flesh forming feeds will put them in shape so they will be a credit to the Thanksgiving dinner. Feed all the corn the birds will clean up. Feed the mixture of milk, shorts and oil meal in a trough. Keep the feeding utensils clean, provide fresh water, clean the fattening pen out occasionally and the fowls will flourish. And these directions will apply equally to the preparation of fowls for Christmas.

Use judgment when picking out the fowl for the Thanksgiving dinner. We will discuss turkeys first of all. If a small turkey is desirable, a plump hen turkey is usually the best. If a large turkey is required select a fat gobbler. While a plump turkey is a joy forever, a thin, tough turkey is a punishment.

Picking and Preparing Turkeys.

After the bird is executed remove the feathers. Singe the body by holding it over a flame. This flame may be made by igniting an old newspaper. Change the position of the carcass constantly, so every portion will get singed. The singeing process will remove the down. Pin feathers may be removed with pinchers or a small knife.

To remove the leg tendons make a couple of cuts about an inch long on the under part of each leg; take a steel skewer and pull the tendons out one at a time. To remove the feet cut through the skin around the leg one and a half inches below the leg joint, place leg at this cut over a board, press down and break the bone, then pull out the foot.

Next make an incision just below the breast bone large enough to admit the hand. Then remove entrails, heart, liver and gizzard. Handle the gall carefully as it must be removed with the liver, and separated later. Next remove the lungs and kidneys. Pull out the wind pipe and the crop. Then draw down the neck skin and cut the neck off close to the body. After the dressing is finished wash the carcass thoroughly and wipe as dry as possible both outside and inside.

The stuffing is an important part of the dinner. There are various methods of making stuffing for turkeys. The best stuffing is made by using one or two loaves of stale bread (according to size of turkey), removing the crusts with a sharp bread knife, and rubbing to a fine crumb. Season with salt, pepper and other finely pulverized seasoning to taste. Then add enough water to moisten the bread crumbs until they will stick to-



A Wheelbarrowful of Vegetables for the Thanksgiving Dinner.

gether. Add butter the size of an egg. Beat two eggs thoroughly and mix in. Stir the mixture thoroughly. This is the tastiest and best all-round stuffing which can be made. If desirable chop an onion up in fine bits and mix in.

Stuffing and Roasting.

To stuff the turkey stand it with the legs upright and fill the cavity. Then tie the drum sticks together firmly, and fasten to the tail with a strong string. To truss a turkey insert a steel skewer through middle joint of one thigh, run through body, and come out under middle joint on opposite side. Turn tips of the wings under and fasten with a skewer. Turn the carcass on its breast, cross the string attached to tail piece, and draw it around each end of the lower skewer. Again cross the string, drawing it around each end of upper skewer. Then draw each string through neck skewer and pass around each end of the upper skewer a second time. Tie securely. To roast the turkey place it on a rack in a

dripping pan; rub the outside of the carcass with salt. Then make a dough of flour and water, rolled to one-eighth or one-quarter of an inch in thickness. Dredge bottom of pan with flour. Bake in a hot oven. When the flour in the pan begins to brown add two pints of boiling water. Cook for at least three hours. Add more water as water in pan evaporates. After the carcass has cooked two hours and a half brush the entire surface with butter.

It is quite a trick to carve a turkey properly. First of all study the bird's anatomy. Have a sharp knife and be sure your hands are steady. Remove the thighs and drum sticks together, then separate the drum sticks. Remove the wings separately. Usually the breast meat is cut in slices. The dressing may be served with the turkey meat, or in a separate dish. Usually the manner in which the food is served cuts little ice. The essential thing is for each member of the family to get his share. If he succeeds in doing this he has cause to be thankful.

Geese and Chickens.

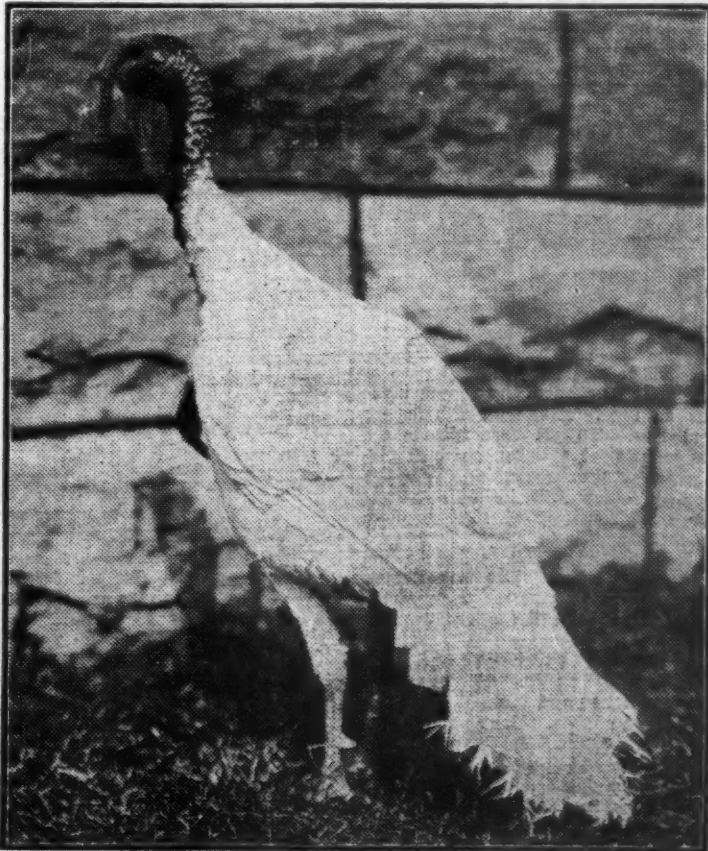
The goose makes the base of a good Thanksgiving dinner. Usually the best results are obtained if the goose is boiled. This is not a difficult process. Dress and singe the carcass, put into a deep dish, cover with boiling milk and let stand over night. In the morning wash off the milk and put the goose into cold water on the fire. When the water is boiling hot remove the goose, wash in warm water, and dry thoroughly. This may seem a long process for dealing with a goose; but the fact is a goose is oily, and this oil must be removed if the best results are hoped for. The process outlined above will remove all the oil. The dressing (or stuffing) recommended for the turkey will answer equally well for the goose. After the carcass is stuffed put it in cold water and boil until tender.

Some of us will have to depend upon chicken for our Thanksgiving dinner. What is superior to a chicken pie? Cut the chickens up; soak in weak salt water, wash thoroughly and put in a kettle with two quarts of water. Season with salt to taste; two or three teaspoonfuls should be sufficient. Boil half an hour. Make the crust by mixing half a pound of lard with two quarts of flour. Take two teacupfuls of sour cream and a teaspoon and a half of soda. Knead the combination and roll out in a crust half an inch thick. Put the chicken and broth in a dish of ample size, slip in a teacup, upper end down, then put the crust in the utensil, bringing the edge a little over and above the rim of the dish. Before putting on the upper crust add half a pound of butter, seasoning to taste, and some flour to the chicken and broth. After the crust is in place prick holes in the top so the steam can escape. It is understood that there are two batches of dough. One batch is used for lining the interior of the vessel; the other batch is used for putting over the top. Bake for an hour and a half and serve hot. This chicken pie cannot be beaten.

The Pumpkin Pie.

Of course, we will require pumpkin pie. Pare the pumpkins, cut in small bits, and boil the day before the pies are made. When the pumpkin pieces are tender rub them through a colander. To three pints of strained pumpkin add five eggs. Use a pinch of salt; a pint of sweet milk, sweeten to taste, flavor with ginger and possibly a little lemon extract, put in a hot oven and bake quickly. Of course the pie pans must first be lined with crust.

If the family has turkey, goose, or chicken pie, they are prepared to give unlimited thanks when the happy day arrives. Too many fine "fixings" on the table are a nuisance. Thanksgiving day will pass off smoothly and satisfactorily to all concerned if a few preparations are made in advance. But don't forget to make them in lots of time. With the exception of Christmas, no other festival of the year works up a keener appetite.



A LANDLORD WHO CO-OPERATES WITH HIS FARMER TENANTS.

The more or less indifferent attitude of landlords in general to their tenant farmers is in sharp contrast to the actions of Mr. Jas. V. Hilligoss to the farmers who are renting his land. Mr. Hilligoss has over 1,000 acres near Homer, Rush county, Indiana. This land has been in his possession for almost 50 years, and during that period of time it has been cultivated by tenant farmers. There are altogether seven tenants on this land which is rented upon a share basis.

The general type of soil is clay and black loam and is comparatively level. General farming is practiced. This entire tract of land is well drained. There is a tile, the mains of which run from 12 to 18 inches at a depth of four feet.

Mr. Hilligoss has observed the ill effects that a short lease usually brings, so he has endeavored to make the longest leases possible to his tenants. He has encouraged them in every way to raise cattle, which all of the tenants



The Use of Fertilizers and Good Farm Methods Produced This Great Growth of Corn.

are doing to quite a large extent, as he insists upon the liberal use of manure upon the soil.

A three-year crop rotation of corn, wheat and clover is practiced by all of his tenants. The use of fertilizer is one important stipulation of his leases with his tenants. One-half of the cost of the fertilizer is borne by Mr. Hilligoss.

He had a total of 280 acres of very fine wheat this year. He used about two and one-half bushels of seed per acre and makes a liberal application of a good fertilizer on both his wheat and corn. Wheat is drilled on the corn stubble, sowing between September 20 and October 15.

The fertilizer attachments to the corn planter are used when drilling the fertilizer. It has been found by all his tenants that corn matures earlier and is of much better quality when fertilizers are used.

Mr. Hilligoss works in harmony with all of his tenants who have respect for his judgment and opinion. He visits each of them frequently and works patiently and zealously with them in cultivating their farms. Mr. Hilligoss and his seven tenants operate on a basis that makes one feel that they are a large happy family working harmoniously for one purpose. Many landlords will do well to study the farm of Mr. Hilligoss and the wise methods he employs in renting his land. More landlord farmers like Mr. Hilligoss would mean much to this country.—Henry G. Bell, Illinois.

A METHOD OF BURNING LONG-LEAF PINE STUMPS.

A cheap and satisfactory method of disposing of the long-leaf pine stumps of the South has been employed in western Louisiana and eastern Texas. A trench about eight inches deep is dug entirely around the stump. A 1½-inch hole is then bored, starting near the bottom of the trench and extending downward at an angle of about 45 degrees slightly past the center of the taproot of the stump. The hole is then loaded with a small amount of dynamite; the charge is then tamped and exploded. The dynamite is used

simply to crack the stump. From half to a whole stick (¾ to 1 lb.) is sufficient to crack a 20-inch stump so that it will burn without further attention to slightly below the bottom of the trench. The hole in the taproot may be bored by hand or by means of the electric boring machine described in Farmers' Bulletin No. 600, Department of Agriculture, Washington, D. C.

The advantages of this method over the usual practice of breaking the taproot and throwing the stump out of the ground with dynamite are the great saving in dynamite, the elimination of expense in disposing of the pieces of stump, and absence of deep holes to be filled. Burning the stumps in the ground does not appear to injure the soil.

FEEDING SILAGE TO CATTLE, SHEEP, HOGS AND POULTRY.

To get the best results from silage it must be fed with judgment. When given in the proper proportion, mixed with other feed, it will produce better results than when given as a straight ration. Mouldy and frozen silage are to be guarded against. Mouldy silage occasionally kills the animals that eat it.

Silage gives good results when fed to dairy cows, beef cattle, stock cattle, sheep, stock hogs and poultry. There are many farmers who will not feed silage to horses and mules. If a man intends to give his horses and mules a silage ration, he should be exceedingly careful that the silage is not moulded. Horses will use from 10 to 15 pounds of silage a day per head. Along with the silage they should receive their ration of hay or other dry, bulky roughness.

Some farmers consider that silage is a better feed for cattle in the fattening corral than for stockers. When made of the right crops, silage will put meat on the fattening cattle at a rapid rate. The best silage for feeding to fattening steers is made of Indian corn and cowpeas. The stalk and ear of the corn and the cowpeas are grown together, harvested together, and made into silage together. The corn is a carbohydrate; the peas are rich in protein. The combination makes an almost perfect balanced ration. Fattening cattle will use from 25 to 45 pounds of silage a day. There is such a difference in the size of fattening steers, etc., that a wide variation regarding the amount of silage to be fed daily must be given.

The dairyman smiles broadly and seeks safe investments for his extra money when he has a plentiful supply of good silage. Silage in January is the same as green pasture in summer. Dairy cows require a succulent feed, and silage fills the bill. The dairy business has taken on an added impetus since the great value of silage as a ration for dairy cows has become widely circulated. Dairy "heifers" and cows will use from 25 to 45 pounds of silage a day. A dairy herd, fed silage, will quickly repay the cost of erecting the silo. If the farmer had no other use for silage than to feed it to dairy cows it would pay him to erect one. Silage must be only part of the dairy cow's ration if the best results are expected. The ration must be skillfully compounded if the cow is to break any local butter fat records. Generally speaking the dairy cow should receive 30 times as much silage as linseed meal, 15 times as much silage as bran, eight times as much silage as corn chop, and three times as much silage as alfalfa (or other) hay. To get best results the feeds mentioned above should be given in the right proportion. Then a balanced ration will be fed. Silage is such a "tasty" food that animals frequently refuse to eat enough protein feed (such as alfalfa hay) when they can get silage. For this reason it is necessary to give the concentrated protein in the form of linseed meal, etc.

Silage is an excellent feed for young stock cattle. It promotes rapid growth; and rapid growth means more profits. Young stock cattle will use from 5 to 20 pounds of silage a day. The young cattle that look the best when spring comes are usually the ones that have had a silage ration during the winter months. Here again it is necessary to balance

the ration by giving some dry protein food.

Sheep will use from two to seven or eight pounds of silage a day. Use great care when feeding silage to breeding ewes. Mouldy silage may cause abortion, indigestion, etc. When fed with judgment silage is a good feed for sheep.

The stock hog appreciates silage perhaps more than any other animal. The hog has a bad time during the winter if he has to eat corn alone. Silage satisfies the stock hog and the brood sow as no other feed will. It is natural for a hog to hunt succulent feed; silage takes the place of a herd of cattle in the hog corral. Hogs will use from two to six pounds of silage per head daily. It should be remembered that two pounds is enough only for a small hog. The old brood sows will raise a strong, healthy spring litter if they have silage during the winter months.

Silage is good for all kinds of chickens. It should be fed during the warm part of the day. Damp food of any kind is not good for poultry during extremely cold weather. Usually the poultryman makes silage part of the feeding ration for his flock.—Clement White, Kansas.

Six thousand bushels of lodgepole pine seed have been collected this fall on the Arapaho national forest, Colorado, for use in reforestation work next spring.

A surprisingly large number of substances, ranging all the way from the condensed fumes of smelters to the skimmed milk of creameries, have been tried or suggested as means of preserving wood from decay. Most of them, however, have been found to have little or no value for the purpose. Certain forms of coal tar creosote and zinc chloride are the most widely used wood preservatives.

Make Money Pulling Stumps!

Add new, rich, crop growing land to your own farm by clearing it of stumps. Clear your neighbors' land. Your Hercules will be kept busy when others see what it does. Big profits for you. With the

Hercules Triple Power Stump Puller

You can clear an acre a day. The known and proved stump puller all over the civilized world—easiest to operate—most durable. Special introductory price, 30 days' trial offer, \$3 years' guarantee, on immediate orders. Write for big Free book of land clearing facts.

HERCULES MFG. CO.
1159 23rd St.
Centerville, Iowa



Vanity Case FREE

Made of rich German silver, with fancy flower border. Has good mirror and powder puff compartment. Places for quarters, dimes and nickels, also strong catch that will hold cards and bills, 10-chain. Given free to anyone for selling 20 large art and religious pictures at Lucash. We trust you with pictures until sold and give you 40 beautiful postcards as an extra gift for promptness. Send your name today.

People's Supply Co., Dept. R.W. 716 Lucas Ave., St. Louis

NEARLY FREE THIS BIG 3½ FOOT TELESCOPE with Patented Solar Eye Piece

Here's a bargain. Never before has it been possible to obtain a Multi-focal telescope with solar eyepiece attachment for less than \$3 to \$10. But because we have made special arrangements with the inventors, and pay no patent royalties, and have them made in tremendous quantities by a large manufacturer in Europe with cheap labor, we are enabled to give you this outfit, provided you will send us \$1.00 to pay for a one year, new or renewal subscription to COLMAN'S RURAL WORLD and 35 cents extra to help pay mailing and packing charges on the telescope outfit (total \$1.35). Think of it—the solar eye-piece alone is worth more than that amount in the pleasure it gives—seeing the sun spots as they appear, and inspecting solar eclipses.

The Excelsior Multi-focal Telescope has a multiplicity of uses—its pleasure is never dimmed—each day discovers some new delight. Distinguishes blocks away. Reads signs invisible to the naked eye. Use it in cases of emergency.

Take the Excelsior Multi-focal Telescope with you on pleasure and vacation trips, and you can take in all the scenery at a glance—ships miles out; mountains, encircled by vapors; bathers in the surf; tourists climbing up the winding paths.

Used as a microscope it is found of infinite value in discovering microbes and germs in plants and seeds, etc. The Excelsior Multi-focal Telescope is mechanically correct—brass-bound, brass safety cap to exclude dust. Powerful lenses, scientifically grounded and adjusted. Handy to carry—will go in pocket when closed, but when opened is over 3½ feet long. Circumference, 5½ inches. Here-tofore telescopes of this size, with solar eyepiece and multi-focal lenses, have sold for \$3 to \$10, or even more. We do not claim our telescope is as nice and expensive in every particular of construction as a \$10 telescope should be; that would be unreasonable; but it is a positive wonder for the price. Each telescope is provided with 2 interchangeable objective lenses—one for ordinary range and hazy atmosphere the other for extra long range in clear atmosphere, increasing the power and utility of Telescope about 50 per cent.

COULD COUNT CATTLE NEARLY 30 MILES AWAY
F. S. Patton, Arkansas City, Kansas, writes: "Can count cattle nearly 30 miles; can see large ranch 17 miles east and can tell colors and count windows in house."

SAW AN ECLIPSE OF SUN
L. S. Henry, The Saxon, New York, writes: "Your solar eyepiece is a great thing. I witnessed the eclipse at the Austrian Tyrol when the sun was almost 50 per cent concealed."

COULD SEE SUN SPOTS
Rutland, Vt., Feb. 14, 1910.—Telescope arrived O. K. I have seen the spots on the sun for the first time in my life.—Dan C. Safford.



Interchangeable Extra Long Range Objective Lenses; it increases the power 50 per cent.

LIMITED OFFER

Send us \$1.00 to pay for a one year extension on your subscription to COLMAN'S RURAL WORLD, and 35 cents extra to help pay mailing and packing charges on the complete telescope outfit which will be sent postpaid (total amount to remit, \$1.35). Absolute guarantee of satisfaction or money refunded. DO IT NOW.

COLMAN'S RURAL WORLD
718 LUCAS AVE., ST. LOUIS, MO.



HORSE BREEDING AND RAISING

FUTURITY STAKES IN MISSOURI IN THE PAST AND NOW.

Editor, Rural World:—The horse breeders of Missouri should be thankful for the recent change in management of the Missouri State Fair. The change should rectify the stupendous blunder of perpetuating a guaranteed purse for \$500, when the directorate had authorized a genuine Futurity stake, with \$500 added by the State Fair, and trotted under stake rules; under which conditions it should be worth, at the very least, from \$1250 to \$2500. It costs no more to prepare a colt, three years of age, to race for the \$14,000 now paid in the futurity of the Kentucky Trotting Horse Breeders' Association than it costs to prepare one for the \$250 so far paid by the Missouri State Fair, guaranteed purse, no colt winning more than first money, \$250. Stakes are trotted as stakes and any horse distancing his field or any part of it is entitled to first money and all the money horses so distanced could have won.

On the first day of September, 1890, at Marshall, Mo., at a meeting of The Missouri Trotting and Pacing Horse Breeders' Association, we started five 2-year-olds: Miss Edith, by Midas; Dot, by Harold Patchen; Al Wilkes, by Wilkerson; Kiowa, by Midas; John B., by Wilkesmont. Miss Edith, driven by her owner and breeder, Jim Nickel, ex-postmaster at Hannibal, distanced her field in 2.46 and drew \$775. The stake was \$665 with \$100 added by the association. The same stake at Sedalia would have been worth \$1165 as authorized.

Our next stake was for 3-minute stallions, and brought out five starters. It was won by Andrew Allison (best heat, 2:34½) for stake and added money, \$535. Our 2:30 stallion class was a walkover for Orid, by Capoul, in 2:39; stake and added money \$230. Our stake for 3-year-olds brought out four, but only two finished the race. The whole stake was \$395; King Herod got \$285.25 and Miss Cleveland \$89.75.

We had eight stakes. Only two others had any part of the field distanced. In the 2:35 class for pacers, Deaf John Atkinson was driving Little Lulu, by Sea Foam. She repeatedly came down in front of the pore horse. Harry Loper said: "Boys, I'll show you old John is not so deaf as you think for." As he came back, Loper said in ordinary conversational tones, "John, \$10 before you start again." "All right, sir." In six seconds faster time he shut out his field and got \$345. When he came into the stand for his money, he said: "It's too bad—fined \$10 and out of the 2:30 class."

The next was the 3-year-old class for \$465, two starters, won by Gratian. Ponda Sue, by Onward, was distanced in the second heat. I paid these stake myself.

At the state fair at Sedalia, Mo., in 1914, in the three-year-old purse, a three-year-old bred and raised in Jasper county, Mo., made Dan Patch's three-year-old son trot into the 2:10 list to beat her—his first 2:10 trotter. At Springfield, Ill., he repeated, demonstrating in the two races that Missouri has as good a track and is breeding as good horses as the best. Princess Parmelia, a three-year-old 2:10 trotter, by Baron Will Tell 6, 2:19½, out of Parmelia, 2:17, by the pacing son of Nutwood, Birchwood, is as likely to produce extreme speed as any mare that will be bred in 1915 or any time in the next five years. Breed her to the untied Missouri sire, Mightellion, 2:09½, and my word for it, you will get a rival colt or filly that you can safely enter in real Futurity stakes as long as your money lasts.

This is the month for Thanksgiving and among other things we may be

thankful for, is that we have, in harness an editor who is wanting to help the people. With only three private letters from him, I am almost ready to admit that he is broad enough gauged to worthily fill the place so well filled for 60 years. All together let us boom the trotting and pacing horse end of Missouri's successful breeding until the whole world will be compelled to take notice.—L. E. Clement, Pierce City, Mo.

WIND SHIELD NO HELP TO CHAMPION PACER.

In an effort to give the world's champion race horse, Directum I. (1.58) a faster mark behind the obsolete windshield at the Kirkwood kiteshaped track, Wilmington, Del., on Nov. 5, Driver Snedecker failed to even equal the champion's race record. The performance was planned for the purpose of lowering the windshield record of Dan Patch, 1:55½.

Directum I. paced his mile in 1:59½. The quarters for the mile in 1:59½ were: .80½, 1.01½, 1:31—the last quarter, 28½ seconds, or half a second slower than he has shown in the open.

Previous to this performance the champion was given two warming-up heats in 2:19½ and 2:05. The wind was so strong that even the unsightly shield attached to the runner's sulky could not keep it out long enough to prove of any help. This is the fastest heat ever paced in Delaware, but will, of course, not be accepted as a record for the state or track.

COAT COLORS IN HORSES.

The Kentucky experiment station has just published a bulletin giving the results of an investigation of the inheritance of coat colors in horses. This publication should be of interest



One Farmer Who Does Not Believe in Overloading His Horses—For a Disk Harrow of this Size Three Horses Should Be Sufficient.

and value to horse breeders for it gives laws by which colors in horses are inherited. The colors recognized in the stud books are gray, roan, dun, bay, brown, black and chestnut. In mating animals of different colors it is important to know what color one could expect in the offspring. The investigation showed that except in exceptional cases these colors do not blend but act as unit characters. The gray color is dominant to bay, black and chestnut. Bay is recessive to gray, roan and dun, but dominant to chestnut and black. Chestnut is weakest and is recessive to all other colors. Black is recessive to bay and gray just as bay is recessive to gray. Chestnut and black may be submerged for generations and then reappear. When gray disappears it cannot again be obtained without going back to it.

The investigation showed further that when horses are pure bred for any color, they will continue to produce that same color for an indefinite number of generations. Whenever chestnuts are produced, they have lost all power to transmit any other color and when interbred will produce nothing but chestnuts. Sex has nothing to do with the transmission of color. That sex controls the color which in the particular mating possesses the dominant color. Thus a well-bred sire cannot control the color

Only \$2 DOWN and One Year To Pay

For any Size—Direct from Factory

You can now get one of these splendid money-making, labor-saving machines on a plan whereby it will earn its own cost and more before you pay. You won't feel the cost at all.

\$24 BUYS THE NEW BUTTERFLY

No. 2 Junior—a light running, easy cleaning, close skimming, durable, lifetime guaranteed separator, skims 36 quarts per hour. We also make four other sizes up to our big 600 lb. capacity machine shown here—all sold at similar low prices and on our liberal terms of only \$2 down and a year to pay.

30 DAYS' FREE TRIAL GUARANTEED A LIFETIME

You can have 30 days FREE trial and see for yourself how easily one of these splendid machines will earn its own cost and more before you pay. Try it alongside of any separator you wish. Keep it if pleased. If not you can return it at our expense and we will refund your \$2 deposit and pay the freight charges both ways. You won't be out one penny. You take no risk. Postal brings Free Catalog Folder and direct from factory offer. Buy from the manufacturers and save half. Write TODAY.

Albaugh-Dover Co., 2238 Marshall Blvd., Chicago, Ill.

of his offspring if he is bred to mares of a color that is dominant to his.

The cause of color is explained. While the bulletin may be a little technical for general reading those interested in the problems of breeding should send to the Kentucky station at Lexington, and secure a copy. It is bulletin 180 and is free for the asking.

ABOUT TROTTERS AND PACERS.

The famous old mare Bush, 2:09½, by Alcyone, 2:27, was put to death

THE NATIONAL GRANGE NOW IN SESSION.

The 48th annual session of the National Grange convened at Wilmington, Del., on Nov. 11. Of the 32 grange states 29 are represented. The unrepresented were North Dakota, Minnesota and Delaware, the latter on account of the illness of State Master Bancroft.

The opening address of National Master Oliver Wilson of Illinois, reviewed the work of the year and indicated the policies, or some of them, which he believed that the grange should approve for the year to come. He spoke with much satisfaction of the fact that the resources of the national grange now amounted to almost \$100,000; to be exact, \$99,992.34. This is a gain of about \$4,000 over last year. In regard to some of the public questions in which the grange is interested that of farm credit he considered as one of the most important. He favors government aid and approved the bill of the joint committees of the House and Senate in principle, but thought it did not go far enough. The oppressive interest rates that have so long obstructed agriculture he said should be speedily reduced. On postal improvement he congratulated the order on the success of the parcel post, a grange measure, and looked with favor on the increase in weight of packages to be shipped by parcel post. He disapproved any attempt to reduce letter postage believing that it might better be retained as it is—and the extra proceeds from the higher rate be devoted to the improvement of the service.

On the subject of federal aid for highway improvement, Mr. Wilson said that the burden of road building and maintenance should be borne by national, state and local governments in fair and equitable ratio. He commended the system of employing prisoners to work on the highways. Relative to the much discussed question of bonding the state to improve the highways he believed the policy wrong and that roads should be improved and

(Continued on Page 12.)

Moving Picture Machine

FREE

BOYS Have you ever seen a machine which will show pictures almost as good as you can see at a show? It is carefully constructed, has a fine lens, powerful electrical motor and is easy to use. You can have loads of fun with it, and we need 4 different sets of films of up-to-date subjects.

We need this complete outfit from any boy or girl who will send us 50¢ of our large 4-in. and 6-in. pictures at 10¢ each each. We send you with pleasure, and take back all your money today. 4 pictures will do.

FREE

Address, PEOPLE'S SUPPLY CO., (Dept. B. W.), St. Louis, Mo.

CATTLE FOR BEEF AND FOR MILK

RED POLL CATTLE BEST DUAL-PURPOSE BREED—REPORT OF SALE.

Editor, Rural World:—One of your contemporaries tells of the importation into this country of unregistered Shorthorns, male and female, for milking purposes. If such an effort has been made, it is remarkable, in that it is the strangest record of misdirected effort reported. Three years ago the United States began issuing certificates for pure-bred animals for breeding purposes, free of duty. Of the Shorthorns in 1911, 48 head were imported, in 1912, 95, and in 1913, 206. Unregistered stock would pay duty and would not be reported.

Of the recognized dairy breeds, we imported, in the three years, 2415 Guernseys, 1751 Jerseys and 42 Holstein-Friesians. Sometimes claims are made for Shorthorns and Ayrshires as dual purpose cattle.

Red Poll cattle, known to exist for at least two centuries as recognized dairy animals, are the only dual-purpose cattle (so called) that, in a strictly dairy contest, have been placed winners. In the six months' test in Ohio, won by a Guernsey cow, 2965, Mayflower, a Red Poll by Mason 698, sire of the Des Moines, Iowa, bull, Breadfinder 986, won second place over both Jerseys and Holsteins.

Mr. D. L. Morse, who has been breeding Red Poll for 20 years, in Newton county, cast his bread upon the waters last week, in selling 13 cows and heifers, most of them bred to Nallor Boy 17205. Twenty-one head were sold that would have brought more money for beef. Only one or two of the cows went out of the county. The herd was built up on stock descended from Mason 698. As dairy stock they were worth as much probably as any herd of Red Polls of the same number that ever passed under the hammer in the United States. The average of the 21 was slightly under \$70 per head. If Mr. Morse will let the 250,000 or more readers of Colman's Rural World know when he will again offer real dual-purpose cattle to the highest bidder, Newton county, Missouri, will not get all the prizes. Even they will not next time feel that they are conferring a favor on him to accept such stock at less than beef prices.

When Mr. Morse bought Nallor Boy he went to buy a full brother, a year younger, but the price (\$500) seemed to him prohibitive; so, after a canvass of Illinois and Indiana, the \$150 saved in the purchase of a herd bull, counting time, trouble and expense, might possibly as well have gone for the younger animal.—L. E. Clement, Pierce City, Mo.

GUERNSEY AND JERSEY HISTORY.

Some interesting historical notes of the Guernsey and Jersey cattle breeds were recently given by S. S. Peer in the Cornell "Countrymen," as follows: There came a time over 100 years ago—some claim it was nearly 200 years—when Guernsey and Jersey fell out as neighbors. Guernsey, as the story goes, forbade Jersey to send any more cattle to Guernsey, the Guernsey farmers claiming they were too small, that they were only a detriment and they would have no more of them. Jersey retaliated by saying: "We prohibit cattle from the Island of Guernsey landing on our shores. They are coarse, ungainly brutes, and we warn you if you bring any more over here they will be killed." Someone, it is said, was caught at making an exchange, claiming he had bought his cattle from the mainland. Then Jersey and Guernsey both passed laws prohibiting any cattle of any description coming to either island no matter where they hailed from. From that day there has never been a live animal landed on either island, except for

slaughter, and no animal that has ever been exported from the islands has ever been allowed to return. The only exception to this was that Guernsey several years ago permitted one of the islanders to exhibit his cattle in England, under severe restrictions that they were to be returned. They soon repudiated this ruling, as the herd so exhibited in Great Britain and returned to the island was the first and only one on the island to have tuberculosis.

While speaking of tuberculosis I may add that of over 1,000 head of Guernseys and Jerseys which I have imported from the islands I have never had one react to the tuberculin test. Dr. T. A. Geddes, the United States V. S. inspector, claims the islands are absolutely free from this disease.

A REVIVAL OF INTEREST IN WORKING CATTLE.

Despite the fact that the use of oxen for farm work is considered an antiquated practice by the average farmer we find that there is a revival of interest along this line, says a writer in the Breeder's Gazette. Formerly the use of oxen was quite prevalent, but as time went on they became almost entirely replaced by horses, especially in the more level sections of the country. In the opening up of any new country we find that the ox has played an important part. In those sections that are level there is a strong tendency for his place to be taken by horses. In the hilly and mountainous sections the change takes place much slower and where the land is very rough, and especially if the soil be poor, the change is never complete. The cause of this revival is not hard to find. In the first place, horses have advanced rapidly in price. Cattle have also advanced, but not so rapidly as horses and mules.

A point decidedly in favor of the work ox over the horse or mule is that as soon as an ox has passed his prime, from the standpoint of work, and is no longer able to do enough work to pay for his feed, he can be fattened and used for beef. The ox does not require the same class of feed as the horse. He can get along just as well on a class of feed that would be largely wasted if one class of feed that would be largely wasted if one did not have cattle to consume it. It costs less to grow an ox to working age than it does a horse, and he will require only about two-thirds the daily cost for feed and upkeep.

The use of oxen on farms is common throughout the greater part of Europe. Even with a country so modern and modern farm machines. Throughout the greater part of Asia oxen are used. In India, Japan, coastal China and on practically all the islands off eastern and southern Asia the use of the larger individuals of the native cattle for working purposes is reported.

In the United States we find the largest number of work cattle in New England and all through the entire Appalachian region. They have been used continuously in this region since the first settlements by white men. It is through these sections, especially in the sections farther north, that we find distinct indications of a revival of interest. Formerly almost any kind of steer was used for work purposes, but now they are exercising considerable judgment in the selection of work cattle. They generally prefer one of the beef breeds, although Sussex and Devon steers are found. They have been shipping in some cattle from the corn belt for work cattle. The local and state fairs are making classes for work cattle and attractive prizes are offered for both individual and town teams. In some of these local shows a lively interest is shown, and the use of the most desirable type of ox is encouraged.

In England oxen were used to a much greater extent than now. In practically all the older English books on agriculture there was a goodly portion devoted to the "ox." If we are going to work oxen we should work only the best that are suited for draft and should work them in the most economical way. The number of oxen in use today is far greater than the attention paid to their selection and management would indicate. While they are not adapted to all sections

there are conditions under which they are proving profitable. A yoke of well-matched, well-bred, well-broke oxen, low-set and heavily-muscled, has its place on some farms in the rougher sections of the east, the same as the team of massive Percherons has its place on the level farms of Indiana, Illinois or Iowa.

IMPORTANT MATTERS THAT AFFECT LIVE STOCK MARKETING.

In marketing live stock several timely matters add much to the profit column. The more important are salable condition of the stock, manner of handling in transit and selection of a favorable market day, says W. H. Underwood in Rural Life. No stock should be shipped in an unfinished condition. Well fattened stock though inferior in quality to animals unfinished in flesh, will sell "all around them."

It is well to bear in mind that there are but two classes of stock in the stockyards for which there is an active steady demand, namely, stock fat enough for the shambles and animals belonging to the feeder class. Prices in the feeder class are always more capricious than those in fat lots, hence stock not up to the requirements of the killer grades land without argument in the feeder class. The loss thus entailed is the amount of feed used in the endeavor to get the herd or flock into the fat class.

Shipping stock to market at as little loss in weight as possible claims attention. Shrinkage forms a large item in the expense of transporting cattle to market. Grass-fed cattle shrink badly, especially if the distance shipped be over 100 miles. Cattle fattened on corn or hay, or both, will reach market in much better condition than grassers and in consequence present a trim, desirable appearance in the sale pens.

It is well for several days previous to shipment to feed rations that are binding. Corn should be discarded or fed sparingly for while it ultimately makes firm flesh, it is too heating for a traveling ration. Good timothy hay fed for three or four days previous to shipment, cutting down the corn ration, is the best check.

As the drift upon hogs and sheep is much less than that of cattle, comment is unnecessary beyond a brief warning against stopping the former or allowing the latter to have heating food for 48 hours before shipment.

The most successful live stock marketing is done by those who manage to have their offerings ready for the sale pens when there is a scarcity of fat grades. A safe procedure is to ship when the market is on an upward tendency and as soon as it indicates a reasonable profit for the shipper. The shipper who is satisfied with a fair profit and who has the nerve to "let loose" regardless of future blandishments may be ranked as a successful marketer for he is sure to make money out of every shipment.

BREEDING COWS AND HORSES.

It is difficult to understand why in many communities dairymen will join a stallion association and pay \$100 or more for stock in the concern when they have but a few mares to breed to the stallion, which the association buys, while at the same time they will refuse to pay \$100 for a pure-bred bull

that can be used on 50 or 100 cows. We have in mind a certain dairy section in California in which the dairymen subscribed \$3,000 to pay for an imported coach stallion, but not one out of 10 of them ever thought of buying a good bull to head their herds.

Of course, if you are going to breed horses, breed good ones. But why not apply the same rule to cows? Suppose the \$3,000 to which we referred, would have been invested in 30 bull calves, what a showing they would have made in that section in the way of better cows; and how their combined effort would have overshadowed the results from the \$3,000 stallion who was sent out on daily trips in charge of his keeper, soliciting mares for service, while the cows were being bred to inferior sires. It is a poor policy that takes the money that the dairy herd earns and applying it to the other live stock on the farm. The cow should have the first consideration when it comes to making improvements.—Pacific Dairy Review.

Much of the success of a dairy herd, large or small, lies in the proper raising of the heifer calves from the best cows.

The American Aberdeen-Angus Breeders' Association will hold its annual convention on Tuesday, Dec. 1 at 2:00 p. m., at the Grand Pacific Hotel, Chicago.

LEARN THE Automobile Business

At a School Where They Actually Build Cars

Mr. C. A. Coey, the world's premier autoist and winner of many world's records, has prepared a correspondence course which you can study in your own home during your spare time. Or you can go direct to this school. This is a great opportunity for ambitious young men to learn to run, repair and sell automobiles and

MAKE \$100 to \$400 A MONTH

We have started hundreds of young men on the road to big pay. But paying positions are waiting for men in this business. All you need is training. It's not luck, it's pluck. If you have pluck you can make good and we help you. Before you turn the page answer this advertisement. It's important. Read what this man says:

Mr. C. A. Coey: Dear Sir: I wish to take this occasion to thank you for what your course has meant to me. It increased my wages 65-75 per cent easily and has given me healthier work and more prospects of promotion. (I took the course several years ago; have driven the "Chase" truck for the Postal Tel. Cable Co.) then I ever had before. Wishing you continued success. I am sincerely,
BRAUNER J. OSTERGAARD
1838 N. Albany Ave., Chicago, Ill.

You can get this car and the agency for your territory.



We give you the agency for the Coey Jr. in your territory. Make \$100 to \$400 a month. Pay your own boss. It's easy. We show you how. Write today for details and catalog.
C. A. COEY'S SCHOOL OF MOTORING
DEPT. 1195, COEY BLDG., 2918-12 WABASH AVE., CHICAGO, ILL.

This beautiful Bracelet is all the rage. Adjustable to any size wrist, gold plated throughout. Engraved links. Set with fancy engraved beaded ornament with large ruby stone. Ring is set with 3 brilliant. Very handsome. Free for selling only 20 of our magnificent art and religious pictures at 10c each. We trust you with pictures until sold, and give an extra gift of 40 beautiful postcards for premiums. Send name today.
People's Supply Co., Dept. 1195, 716 Lucas Ave., St. Louis

**BRACELET
AND
RING
FREE**

"INVINCIBLE, UNSURPASSABLE, WITHOUT A PEER"

Writes a regular subscriber, who has read it for many years, of
the **TWICE-A-WEEK** issue of the

St. Louis Globe-Democrat

TWO ONE-DOLLAR PAPERS ONE YEAR FOR ONLY \$1.

and this is the unanimous verdict of its more than a half million readers. It is BEYOND ALL COMPARISON, the biggest and cheapest national news and family journal published in America. It is STRICTLY REPUBLICAN in politics, but is above all a NEWSPAPER, and gives ALL THE NEWS PROMPTLY, accurately and impartially. IT IS INDISPENSABLE to the Farmer, Merchant or Professional Man who desires to keep thoroughly posted, but has not the time to read a large daily paper, while its great variety of well-selected reading matter makes it

an **INVALUABLE HOME AND FAMILY PAPER.**

Two Papers Every Week. Eight Pages each Tuesday and Friday.

Sample Copies Free.

GLOBE PRINTING CO.
ST. LOUIS, MO.

RURAL WORLD and GLOBE-DEMOCRAT
EITHER ADDRESS, BOTH FOR **\$1.00** NEW

CREAM OF THE DAIRY NEWS

SOME ABNORMALITIES IN MILK PRODUCTION.

Stringy milk is undoubtedly caused by the agency of fungi. On placing such milk under the microscope, small, round bodies can be seen which sometimes present the form of beary chains. This abnormality occurs most frequently during the summer, and in dirty surroundings, and is often due to feeding of decaying fodder infected with bacteria. Such milk, on the first day after milking, will be still thin; on the second day it will be quite thick, flows badly, draws out into threads, curdles, has but little cream, an insipid taste, is difficult to churn, and the butter obtained is greasy and of a bad flavor. It often presents a white, jelly-like mass which is so tough it will not run when the bowl is reversed. Stringy milk forms little or no cream and has a pronounced power of infection; a small quantity added to normal milk will taint the whole mass.

Treatment.—Thorough disinfection of the rooms where the milk is kept with sulphuric acid or hot steam and the careful cleansing of all utensils. Heating the milk to 150 degrees F. will destroy the micro-organisms. Where there are any indications of digestive trouble in the cows, they should be fed dram doses each of sulphate of iron and gentian mixed three times a day for a week. If this treatment should fail, try dram doses of hyposulphide of soda given in the same manner.

Bloody Milk.

Bloody milk can be traced to several causes. Not infrequently blood may be noticed in the milk immediately after calving and may last for several days. In other cases it is due to an injury to the udder, by a blow or kick, rough milking or to the butting of a sucking calf. Congestion of the udder, due to a chill at time of calving, is often a cause, and a too sudden change to rich nitrogenous food may produce it. Some cows are predisposed to this trouble because of a congenital weakness of the walls of the arteries. The small vessels supplying the udder will rupture on the slightest (or even no) cause and a little blood will escape into the milk until the artery heals again, and a recurrence of the trouble may occur at short intervals.

Treatment.—If due to an injury to the udder, hot fomentations should be applied to reduce the inflammation. Persistent hand rubbing will always aid, and a liniment composed of one ounce each of spirits of turpentine, methylated spirits and tincture of belladonna, mixed with three ounces of water, should be applied two or three times daily. If the cause is due to congestion, causing a hardening of one or more quarters of the udder, the same treatment is all right, but the patient should have a drench composed of from one to two pounds of Epsom salts with a tablespoonful of ginger. In cases where the trouble is due to congenital weakness of the arteries, treatment is not very satisfactory as recurrence of the condition is very likely. Tincture of iron given in two-ounce doses mixed with water and administered as a drench three times a day will always help to overcome this condition.

Abnormal Flavoring Matter.

Abnormal flavors often arise from food stuffs consumed when in process of decomposition. The following might be mentioned: Rancid oil cake, bad or frozen potatoes or turnips, sour brewers' grains, or large quantities of turnip tops. Foods such as those contain an aetherial oil which will have an injurious effect on the milk. Also certain plants and grasses might be named, such as dandelion, wormwood, tansy, garlic and artichokes. An excess of oat or pea straw may cause this defect. In all these cases the

milk obtains an unpleasant, rancid, bitter, salt or harsh flavor.

Drugs Which Will Affect Milk.

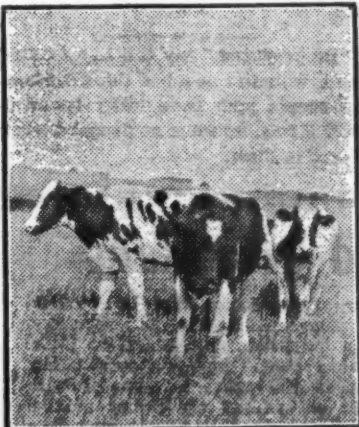
Many of the drugs in most ordinary use among cows will, to a greater or less extent, pass into the milk and produce corresponding effects on those using it. Among the commonest are camphor, spirits of turpentine, asafoetida, tartar emetic, aloes, and carbollic acid. The various salts, such as Epsom or Glauber salts, soda, potash or borax, or even common salt in too large quantities, may produce an undesirable effect on milk. In some cases alcohol has been tasted in the milk of cows fed on the refuse of distilleries.

Soapy Milk.

Soapy milk has a soapy taste, never coagulates however long it stands, but precipitates a slimy sediment and gives a frothy cream which is extremely hard to churn into butter. The cause of this condition has been traced to the presence of a special bacillus which gains an entrance to the system through the eating of infected straw and hay.

Treatment.—Consists in removing any infected fodder as well as being careful to thoroughly clean the udder before milking.

Different forms of disease are often transmitted to the human family through the medium of milk. The most important instance of this is tuberculosis. Experiments in feeding



Young Milk Making Machines That Have the Energy and Breeding to Operate At High Speed.

milk from tubercular cows have proved its power of infection to be very great. The milk of cows suffering from disease of the lungs soon turns putrid and is not fit for human food. Foot and mouth disease is often communicated to man and animals through the medium of milk. Milk is also said to be capable of transmitting typhus, scarlet fever, cholera, and diphtheria to the human family. Consideration of the above scientific facts ought to stimulate all producers of milk to use the utmost care to see that dairy cattle are fed on thoroughly clean and wholesome food, and to use the utmost care to keep the milk free from any contagion after it is drawn from the cow.—H. G. Reed, U. S.

PERSISTENT PRODUCTION.

Editor, Rural World:—Persistent production is a valuable characteristic of the Sophie's Tormentor Jersey cows, many cows of this family having demonstrated this persistency, most conspicuous of which is Sophie 19th of Hood Farm, who gave in five years, authenticated tests, 64015 pounds milk, 4414 pounds 14 ounces 85 per cent butter.

Another cow of this family bids fair to exceed this heavy production, Lou 2d of Hood Farm 250505; dropped Feb. 7, 1909. Dropped first calf when two years 1 month of age, giving in the year 7465 pounds milk, 512 pounds 5 ounces butter. She qualified for class AA. Commenced second yearly authenticated test when two years four months of age, giving 10186 pounds 7 ounces milk, 688 pounds 7 ounces butter; qualified for class AA, winning bronze medal 1913 for third largest production by Jersey cows, three years and under four. Commenced test when four years eight months of age, gave in the year 12456 pounds 15 ounces milk, 833 pounds 1 ounce butter, and as she is

due to calve Dec. 14, will qualify for class AA.

By looking under "Highest Yields of Jersey," I find this record places Lou 2d of Hood Farm as fourth high cow class 7. Total production on authenticated tests for three years 30,106 pounds 6 ounces milk, 2033 pounds 13 ounces butter. She was on test 13 months in three-year-old form, but last 12 months constituted her authenticated test. In the first month she gave 1099 pounds milk, 56 pounds 6 ounces butter. Adding this to her three yearly authenticated record she produced 31207 pounds 6 ounces milk, 2090 pounds 3 ounces butter. Dropped three living calves (the oldest of which has entered the register of merit) and is due to calve again in six weeks, and will not be six years old until February, 1916.

Lou 2d of Hood Farm is a double granddaughter of Hood Farm Torono (the greatest sire of high producers), who is a grandson of Sophie's Tormentor.—J. E. Dodge, Manager Hood Farm, Lowell, Mass.

SEDIMENT TESTS FOR MILK.

For some time it has been known that the sediment test of milk would reveal the amount of dirt that often finds its way into the pail, can or bottle. One of the principal sources of contamination of milk has been proven to be the amount of foreign substance that finds its way into the milk from the time the pail is set under the cow until it reaches the consumer. When a large amount of milk is run through the separator there will be considerable animal matter and dirt, that is thrown to the outside of the bowl. This has been quite a revelation to many careful milk producers and the sediment test will show similar results; and with considerable more accuracy, in regard to the amount of foreign matter that finds its way into the milk. In fact, it will take a position for showing dirt similar to the Babcock test for giving the correct amount of butter fat in milk.

The sediment test itself consists merely of filtering a pint of milk through small cotton discs. The city of New York has passed a regulation requiring all milk bought at the creameries for shipment to the city to be subjected to the sediment test once a week, the results of which are to be posted where all the patrons can see who is producing the best milk and thereby create a friendly rivalry as to whose name shall be at the head of the list. If the milk from any dairy is found to have an abnormal amount of sediment it will be sufficient cause for excluding the milk of that dairy for shipment to the city. Recently, sediment tests were made of a number of samples of milk in Cleveland and a number of dairymen were called in and given a demonstration of the tests and a chance to look over the results of the same. Many expressed surprise and confidently expected that they would be able to produce a more even quality of milk by the use of this test. It is without doubt one of the best tests we have to help the dairyman who is trying to produce a high quality of milk for the city markets.—J. F. Hudson, Ohio.

FROM THE JERSEY BULLETIN.

Habits with the dairy cow are few. Teach her good habits and you will have little trouble in handling her.

Milking is a science and an art as well. You may by carelessness injure the best and easiest milker in the herd. Remember the cow is a mother. Gentle handling and thorough milking help fill the bucket.

Summer and winter, the two most necessary things for the cow are water and salt. But these are such common requirements that they are too often neglected. Keep everlastingly at these little things. Don't neglect them.

The profitable cow is one that makes good use of large quantities of food. Don't stint your cows.

A good "dry milker" is a scarce article and the milker who wets his hands ought never be tolerated in the dairy barn.

Do not mix warm cream with cold cream, as the warm cream will quickly sour the cream that has stood for a day or more.

Milk factories complain as much about the care of the milk utensils as about any other thing which is connected with the producing end of the business. They claim that most of their trouble is caused by milk which is contaminated, not by the cow, the barn or the milker, but by the utensils into which the milk is placed.

SPREADERS \$64.75 UP



RAISE BIGGER CROPS

My New No. 8 Low Down Manure Spreader.

used now means bigger crops next year. You know this yourself. Manure spreading time is all the time. This new No. 8 Low Down Manure Spreader is Galloway's greatest spreader.

Control the best spreader on earth. Double chain drive, endless apron, force feed, front wheels, rear wheels, lightest draft of any low-down machine. Capacity 50-75 bushels. All steel body, complete with double-drum and rock-shank. Flexible rake, high speed beating pulverizer. Heavy duty bearings. Steel wheels, gears, axles, and all other essential parts. Traced like a steel bridge. Best value in any spreader. Superior in every respect to any spreader of heavy draft that cost you up to four times as much. You will find your horses.

Wm. Galloway, Pres.

Wm. Galloway Co.
135 Galloway St. Waterloo, Iowa

GERMAN SILVER MESH BAG FREE

Oxidized frame, prettily embossed with handsome floral design; 16-inch chain. Mesh Bags are all the rage. Very handsome. Given free for selling 25 boxes art and religious pictures at 10c each. We trust you with pictures until sold, and give 40 beautiful postcards as a extra gift for promptness. Send name. A postcard will do. People's Supply Co. Dept. 77
716 Lucas Ave., St. Louis

DO YOUR OWN MENDING

WITH A SET OF THE "ALWAYS READY" COBBLER'S TOOLS.



This handy shoe repair outfit was made especially for home use. With the aid of these tools you can easily do any kind of shoe repairing at a great saving of time and expense. The outfit comes securely packed in a box and consists of the following: Iron stand for lasts; one each 9 in., 7 1/4 in., 5 1/2 in. last; shoe hammer; shoe knife; peg awl; sewing awl; stitching awl; one package of heel nails; one package of clinch nails; and full directions. A most complete and serviceable outfit which will always give satisfaction.

Our Offer: This Cobbler's Outfit may be had free, all mailing charges prepaid by sending one dollar to pay for a one year's new or renewal subscription to Colman's Rural World and a one year's subscription to Farm and Home, the great semi-monthly farm paper, and 25 cents to help pay packing and mailing charges—\$1.25 in all. Either new or renewal subscriptions will be accepted. Just write a letter and say, "I enclose \$1.25 for one year's subscription to Colman's Rural World, and one year to Farm and Home, and one complete Cobbler's Outfit to be sent postage prepaid."

Address subscriptions and remittances to
COLMAN'S RURAL WORLD,
St. Louis, Mo.

COLMAN'S RURAL WORLD

A. B. CUTTING, Editor.

Advertising Representatives,
HOPKINS & SHAYNE,
910 Hartford Bldg., Chicago, Ill.

ADVERTISING RATES
25 Cents per Agate Line.

A COUNTRY PROSPEROUS AND AT PEACE SHOULD BE THANKFUL.

If there is one country in the whole wide world that has cause for thanksgiving this year, more than any other year perhaps in its history, it is this land of freedom and blessedness, the United States of America. When most all of the countries of Europe; India and Japan in Asia; Australia, New Zealand and South Africa in the southern part of the eastern hemisphere; and Canada, Newfoundland and some of the West Indies, as well as Mexico in North America, to say nothing of British Honduras and the Guianas in Central and South Americas, are fraught with strife and bloody warfare, directly or indirectly, this country is at peace and prosperous. Both as individuals and as a people we are favored beyond all others.

Not only for our neutrality in this war should we be thankful, but also for the many other advantages that we enjoy. We are citizens of a country where law and order reigns, in which education is free and where all men have equal chances for making a living and for gaining wealth.

Among all the blessings that a country can enjoy none is more appreciated than a bountiful harvest of the fruits of the earth. Crops in most parts of the country have been good and where crops have been poor prices are comparatively high. Even for the cotton farmer conditions are improving.

Every ear of corn, every golden pumpkin, every apple—everything, tells us to be thankful. In country places where one is in constant commune with Nature, there is special cause for thanksgiving in the abundance of our gifts.

FACTS AND FANCIES.

"Better be safe than sorry"—and get those implements in out of the rain or snow.

"The raven croaked no more"—after Mr. Farmer pinked him with a shotgun in the cornfield.

"A bird in the hand is worth two in the bush"—when trading horses with a man you don't know.

"There's always room at the top"—for more thorough spraying of fruit trees in old orchards.

"There's no time like the present"—to figure your profit or loss and find out what's to blame, or who.

"All that I want is Love"—would sound funny from a mule, but he might think it just the same.

"There's no use in crying over spilt milk"—and there's less sense in trying to kill the cow that put her foot in the pail.

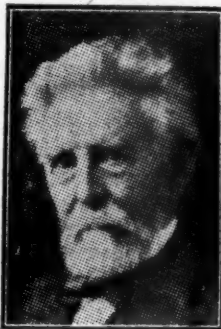
The breeding of plants can be carried to extremes. A man might spend years in originating an odorless onion. The more perfect the product the less

Founded by Hon. Norman J. Colman

Published by Colman's Rural World Publishing Co.

Colman's Rural World was established in 1848 by Norman J. Colman, who later became the first United States Secretary of Agriculture. As a champion of advanced agriculture this journal has attracted nation-wide support, and is today held in highest regard by thousands of intelligent and discriminating readers.

Colman's Rural World strives to bring the greatest good to the greatest number at all times. Each issue is replete with helpfulness and good cheer. It is read for profit and pleasure, and yields a satisfactory return to each individual subscriber. Our advertisers are rewarded with excellent results.



NORMAN J. COLMAN,
First U. S. Secretary of
Agriculture.

Colman's Rural World is mailed postpaid to any address in the United States or island possessions for one dollar per year or three years for two dollars. All subscriptions payable in advance. Remit by draft, registered letter, post office or express money order. In changing address give old and new addresses.

Colman's Rural World is published every Thursday at 718 Lucas Avenue. Contributed articles on pertinent subjects are invited. Photographs suitable for reproduction also will be welcomed. Address all communications to COLMAN'S RURAL WORLD, 718 Lucas Ave., St. Louis, Mo.

Entered in the postoffice at St. Louis, Mo., as second-class matter.

1914 NOVEMBER 1914						
Sun	Mon	Tues	Wed	Thurs	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

THE FIGHT AGAINST FOOT-AND-MOUTH DISEASE.

The recent outbreak of the foot-and-mouth disease, which is one of the most contagious and destructive diseases of cattle, swine and sheep, exceeds in area affected any of the five previous outbreaks, in this country. Unless the infection can be immediately localized and quickly eradicated, it threatens untold losses among live stock.

So contagious is the disease that in past outbreaks where but one animal in a herd was infected, the entire herd in almost all cases later contracted the sickness. While the mortality is not high the effects of the disease even on animals that recover are such as to make them practically useless. They lose flesh rapidly; in the case of cows, the milk dries up or is made dangerous for human consumption; in the case of breeding animals, the animal once infected becomes valueless for breeding, as it may continue to be a constant carrier of contagion.

It is possible to cure the external symptoms, but during the process of attempting to cure one sick animal the chances are that hundreds of others may be infected. The treatment or killing of a single animal in a herd was tried in an outbreak and did not prove effective, for the reason that the remainder of the herd soon became affected and had to be killed.

As a result of the five outbreaks in this country, and other disastrous epidemics of the disease in Europe and Great Britain, veterinary authorities of the United States are agreed that the only method of combating the disease is to stop all movement of stock and material which have been subjected to any danger of infection, and to kill off without delay all herds in which the disease has gained any foothold. This enables the authorities to eradicate affected herds and to isolate and hold under observation all suspected herds.

For these reasons, the United States Department of Agriculture quarantined a number of states for the foot-and-mouth disease. The federal quarantine prevents all interstate movement of stock and materials likely to carry the infection. At the same time, the state authorities are imposing local quarantines which prevent the passage of animals from farms or localities known to be infected to other localities in the same state in which the disease has not appeared. Each infected herd, as rapidly as the disease is discovered, is killed and the dead animals buried in a covering of lime. The skins of the animals are slashed so as to permit the rapid action of the lime.

The owner of the slaughtered animals is reimbursed on the basis of the appraised value of the herd, the appraiser being appointed by the state. The expense of the whole process of condemnation and disinfection is divided equally between the federal and state governments.

Until the entire premises have been

its value. It's the odor that makes an onion worth having.

To "kill two birds with one stone"—graft a tomato slip on a potato vine.

"Hitch your wagon to a star"—one of the Missouri or Kentucky kind that can step in 2:10 or better.

"Play in your own backyard"—when you think of criticizing the appearance of your neighbor's.

"A stitch in time saves nine"—when the new horse blanket cuts a caper.

"You never miss the water till the well runs dry"—but it pays to drill or dig a little deeper and keep her always wet.

"Be prepared," say the boy scouts—and it wouldn't be a bad thing for some old scouts who have leaky barns on their farms, or work neglected or even a note to meet.

Our Policy and Our Plans

In this, the Thanksgiving number of the Rural World, we wish to say a few words about ourselves. This festival time is opportune for us to offer our sincere thanks to a multitude of readers for their generous support throughout the many years that this publication has striven to serve them. Now and in the years to come it will be our constant and earnest effort to so conduct the policy of the Rural World that it will be deserving at all times of the hearty support and confidence of all its readers.

Colman's Rural World seeks to provide good clean reading for all members of the farm and suburban household. It can be relied upon to give the greatest service to the greatest number. For the farmer, it will supply a key to all his difficulties and to all that is going on in the world of agriculture that is worth noting. For the man new to farming—the townsman who has decided to "go back to the land"—or for the city man who loves nature and gardening, it will make things easy of accomplishment. For the women and the young folks in our country homes, as well as those of the villages and the towns, it will make home life more comfortable, more attractive, more satisfying.

In regard to public affairs that affect agriculture, including the conduct of governments, it will be the policy of Colman's Rural World to give the facts without prejudice and without bias, and to open its columns to the expression of opinions from all sides of questions that merit discussion. In such matters the rules of debate shall be fair play and good feeling. Partial and partisan opinions on politics, religion and the European war will find no welcome.

The land and its products shall be our main theme. Agriculture becomes increasingly complex in its variety as the years go by. New conditions constantly arise, new crops often must take the place of unprofitable ones, new breeds of live stock and new varieties of plants require special treatment, newly opened lands may need particular care and the steady increase of tenant farming is changing the entire complexion of agriculture in many communities. Colman's Rural World considers it its duty to meet the new needs with the same vigor that it caters to the old. Its one mission is to make country life throughout the nation more profitable and more worth the living.

All the various activities of the great out-of-doors in country or town will be dealt with comprehensively. Field agriculture, live stock, dairying, poultry, bee-keeping, fruit growing, floriculture, gardening; seeding, planting, cultivating, harvesting, storing, marketing; bettering and improving the home, child training and recreation; the supply and conditions of labor; organizations of farmers at home and abroad; markets and crop conditions; education, taxation, transportation; literature in verse, essay and story—everything that we can think of, and all that our readers ask for, will be discussed by writers who know from experience what they are talking about. And mingled with the solid matter will be always a little fun and frivolity for old and young.

As we assume that all our readers have a love of the beautiful, and that they desire to realize it more in home surroundings and in daily life and thought, we shall devote considerable space to horticulture. This should appeal especially to persons in cities and suburbs who have homes where they can dabble or specialize in gardening. An art as well as a science is gardening, and to many it is a delightful hobby. Colman's Rural World hopes to cultivate still further this desire in its readers by suggesting and describing how best to plan and plant and practice. It hopes to find a place for itself in every home where better horticulture or better agriculture is the ideal. May it always be a welcome and instructive visitor!

A. B. CUTTING, Editor.

thoroughly disinfected and all danger of spreading the disease removed, the farm is quarantined by the local authorities in the same way in which it would be for a contagious human disease. This local quarantine prevents the visit of individuals or the transfer of any produce or animals from the farm to other farms. In some cases, because human beings can carry the disease to other herds, the state authorities have prevented children on infected farms from attending school. In other cases, as in Illinois and Ohio, the state authorities closed the stock yards until they could be cleaned and disinfected.

The first object of the department is to discover and segregate all animals sick with the disease or that have been exposed. To this end, the federal and state inspectors have been tracing up through bills of lading and railroad records, all shipments of live cattle which have been made during the last 60 days out of any of the infected or suspected districts. The herds of animals so shipped are located and immediately examined by veterinarians. In this way the presence of foot-and-mouth disease has been discovered in various places in the present wide area now under federal quarantine. Similarly, the numbers of all cars in which animals have been transported from these districts have been obtained, and these are being located and thoroughly cleaned and disinfected.

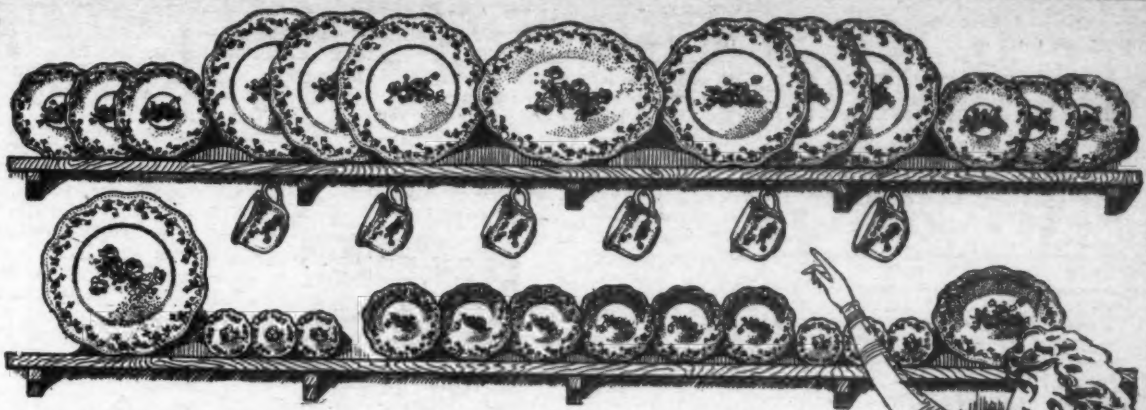
Following the imposition of a general federal quarantine, and the killing of actually infected herds, comes a farm-to-farm inspection of the entire quarantined area. Later, when it becomes clear that the disease has been localized, it will be possible for the federal and state authorities to free from quarantine all but the actually infected counties or districts, and allow the uninfected territories to resume interstate shipments of stock.

At present the chief danger lies in the possibility of there being concealed sources of infection. Farmers and other stock raisers should not fail to report at once to state or federal authorities all suspicious cases of sore mouths or lameness.

"Lend me your ears"—said the Roman soldier to his mule, as he looked for a place to hide.

"Save the Fruit" is the message that is being sent out from the office of the Missouri State Board of Agriculture. It urges the storing and canning of every kind of fruit to the limit of family needs, at least. Sugar has reduced in value in time to encourage home canning. It will pay to buy apples and carefully keep them for home or market use. Take advantage of cheap cold storage where it is available. Boost and use the apple—the finest fruit that grows in this world of ours!

The United States Department of Agriculture sounds a wise warning against the imported Turkestan alfalfa seed. Americans will do well to fight shy of imported seeds of any sort when they can get the domestic product. Insist on knowing what sort and where grown, and the purity test of alfalfa and other seeds when you buy. Clean seed is cheap at a high figure when compared to weedy and poor alfalfa given to you free. Colman's Rural World calls attention to the fact that Missouri is one of the states without any sort of pure seed law. The farmers should demand such a statute.



FREE

**33 PIECE
DINNER SET
AND
41 EXTRA
PRESENTS**

**74
ARTICLES
ABSOLUTELY
FREE**



Every Reader

of this wonderful offer, man, woman, boy or girl can get one of these sets. We have already given away nearly 25,000 sets since we started our dish offer, and although we have to pay more for our dishes now on account of the war in Europe our great popular offer remains the same. Don't let this opportunity pass or you will regret it when it is too late. Now is the time.

Description

This magnificent 33-piece dinner set is the product of one of the finest and largest potteries in the world, the old rose and gold leaf design having become famous in aristocratic homes.

In the center of each piece there is a cluster of roses depicted in their natural colors and surrounded by the brilliant green foliage so that almost the only thing missing is the fragrance. The rich gold leaf border on the edge of each dish adds greatly to the beauty of the old roses, and makes this a valuable and beautiful dinner set.

World Renowned

Each dish bears the genuine stamp and TRADE MARK of the great world-renowned Owen China Company of Minerva, Ohio. This stamp guarantees the high superior quality of this set of dishes, guarantees them absolutely. It proves to you that this is the original Owen china-ware. Oh, if you were only able to see the dishes themselves, the rich deep red of the old roses, which is burned into the ware itself so deep that it won't wear off, no matter how much or how long you use the dishes.

Each set is complete and comes nicely packed in a neat box and is shipped to you by express. We will guarantee, no matter how many dishes you may have that you will prize this set above all others that you may possess.

Thousands Write Us Like This

BETTER THAN SHE EXPECTED.

The 33-piece dinner set has been received O. K. It is the prettiest dinner set I ever saw—it is just grand. All of my neighbors who have seen the dinner set want to get a set just like mine.—S. M. McKeithen, Cameron, N. C.

WIFE TOO ELATED TO WRITE.

Lettie Travis (my wife) is too much elated over her dishes just received from you to write, so I write for her. They are far more beautiful and much better ware than she expected. Please accept our thanks for same.—Kelsie Travis, Hardin, Kentucky.

ALL O. K.

I received my dishes, post cards and extra surprise all O. K., and they are simply fine.—Meta Reiter, Wheatley, Ark. There is hardly a reader of this wonderful offer who cannot secure one of these beautiful 33-piece dinner sets and secure it within a few days after sending name for instructions.

Big Free Offer

41 Extra Articles FREE

115 High-Grade Needles



Fill out the coupon below and send it in to us and we will send you a sample of our famous needlecase, containing an assortment of 115 needles for every purpose, including bodkin, darners, etc.

When you get the sample needlecase we want you to show it to 16 of your friends and neighbors, and tell them about a very special offer whereby each person you see can get a needlecase just like yours, free.

As soon as we get the coupon below with your name and address on it we will lay aside one of these handsome sets of dishes, and the 41 extra articles, and send you the big sample needlecase, together with full instructions, and everything necessary to make the little work easy for you, so that as soon as you finish your work we can send you the 33-piece dinner set and the 41 Extra Articles by express without a minute's delay. An offer could not be more liberal or more fair and we know you will be delighted.

I also include with each set of dishes my special plan for paying all express charges on the dishes. My whole plan is so simple you can't fail to earn a set of these dishes if you will only make up your mind to do so.

The 33-piece dinner set is not all you get by any means. The truth of the matter is there is so much to tell about this big new gift plan of ours that we cannot get it all in this space. It is full of SURPRISES and DELIGHTS for these of our friends who are willing to lend us a helping hand at spare time.

A Surprise

The very first letter you get from us will surprise you before you open it. It will also delight you by telling all about the big collection of rare and beautiful post cards which we want to give you in addition to the dishes.

Another Surprise

And still, THAT is not all. One of the prettiest surprises of all is kept a secret until the day you get the dishes and find a pretty present that you knew nothing about. Isn't this a fascinating idea? And what makes it even more interesting is that we have something nice for everyone of your friends and neighbors, too. We'll tell you ALL about it as soon as we receive the coupon with your name on it.

JUST SEND YOUR NAME

The coupon starts the whole thing. Just send me your name and address. I don't ask you to send any postage or anything else—just the coupon. So hurry up and send it in.

When you get the beautiful dishes, 40 post cards, and the extra surprise premium you will say, "How can you afford to give such beautiful premiums for such little work?" Never mind now HOW I am able to give these valuable gifts, on such a very, very easy plan, the fact remains that I DO give them only to my friends who are willing to lend me a helping hand during their spare time.

SIGN THE COUPON—IT STARTS EVERYTHING.

Send No Money

Colman's Rural World,

St. Louis, Mo.

I want to get a 33-piece dinner set and the 41 extra gifts. Send me the big sample needlecase, and tell me all about your big offer.

Name

P. O.

R. F. D. State.....

THE HOME CIRCLE AND THE KITCHEN

FOR CHRISTMAS.

The Christmas number of the Rural World will appear on December 3, instead of December 10, as previously announced. The change will give our readers more time for taking advantage of the gift suggestions, the recipes and other preparatory matters for the great day that will be published. Readers of this page are asked to send right away their best recipes for making plum puddings, mince pies and other special features of the Christmas dinner, including the roasting of the turkey. And all readers are requested to write letters or articles that tell about the Christmas customs, traditions and revelry of olden times or now. If you have any photographs of Christmas scenes or practices, no matter how long ago they were taken or how recent, send them for reproduction. They will be returned in good order. All together we can fill our Christmas number with helpfulness and good cheer.

THE EDITOR.

BACK HOME FOR THANKSGIVING!

Back home! The autumn breezes from woodland groves rush down
To greet me with their welcome on the road that leads from town.
The rabbits pause, half-bold, half-shy,
'mong knots of withered grass
Along the quiet roadside to view me as I pass.

The meadow-stubble glitters with its veil of starry frost;
Faint whiffs of spicy fragrance from wayside shrubs are tossed;
And yonder stands the homestead with cedars 'round its door,
Enveloped in a glory that I never saw before!

As bright as rays of opals are the gleams of southern moons
Flung over waves of crystal in coral-locked lagoons;
And tropic lands are regal with their gorgeous flower-glow,
But I grew sick to see the land that dares be clad with snow!

Back home to spend Thanksgiving!
Each step upon the soil
My footsteps pressed in childhood seems to draw me nearer God.
The rustle of the dead, brown leaves seems like a murmured prayer,
And the spirit of Thanksgiving broods softly everywhere.

Back home! The Southern people are gay and warm and kind,
But no love is half as loyal as the love which here I find.
And "festas," nursed with music under palm and rose-starred vine,
Lack the soul that fills Thanksgiving in our land of snow and pine!

ADELA STEVENS CODY.
Missouri.

BOYS' AND GIRLS' CLUBS ARE GROWING RAPIDLY.

There are now 2,153 Missouri boys and girls in clubs studying corn raising, tomato raising and canning, stock judging, sewing and poultry raising. Since September 1 83 new clubs have been organized with a membership of 956. The membership of these new clubs is distributed as follows: Poultry raising, 59; stock judging, 348; sewing, 512. The Boys' and Girls' clubs were started by Prof. R. H. Emberson of the College of Agriculture of the University of Missouri last March. Arrangements are now being made for a state exhibit and contest which will be held at Columbia during Farm-

er's Week, January 11-15. The list of premiums and the rules governing the exhibit and contest are being sent out now. Mr. Emberson says that he will be glad to send any information desired if any boy or girl, parent or teacher will write to him at Room 208, Agricultural Building, Columbia, Mo.

HUMAN HEALTH AND THE FOOT-AND-MOUTH DISEASE.

The anxiety that has been expressed in several quarters in regard to the effect upon human health of the present outbreak of the foot-and-mouth disease is regarded by government authorities as somewhat exaggerated. The most common fear is that the milk supply might become contaminated, but in view of the precautions that the local authorities in the infected areas are very generally taking, there is comparatively little danger of this. Milk from infected farms is not permitted to be shipped at all. The only danger is, therefore, that before the disease has manifested itself some infected milk might reach the market. For this reason, experts in the United States Department of Agriculture recommend pasteurization.

It has been demonstrated by experiments that pasteurization will



These Look Big Enough for Pies for Thanksgiving and Half the Winter.

serve as a safeguard against contagion from the foot-and-mouth disease just as readily as it does against typhoid fever, but in any event it must be thoroughly done—the milk must be heated to 145 degrees Fahrenheit and held at this temperature for 30 minutes.

In adult human beings the contagion causes such symptoms as sore mouths, painful swallowing, fever, and occasional eruptions on the hands, finger tips, etc. While causing considerable discomfort, however, the disease is rarely serious.

A HALF-DOZEN APPLE RECIPES THAT ARE WORTH TRYING.

Apple Sauce Cake—Cream together one cup of sugar and one-half cup of shortening; add a pinch of salt, one-half teaspoonful of cloves, teaspoon of cinnamon, a little nutmeg, and one cup of raisins. Dissolve one teaspoon of soda in a little warm water, then stir into a cup of sour apple sauce, letting foam over ingredients in bowl. Beat all well and add two cups of flour. Bake in long tin forty minutes.

Apple Whip—Make a pint of milk into rich custard by adding, when at boiling point, a teacupful of sugar, a little butter, yolks of three eggs, beaten to a cream, and a pinch of salt. Stir all together till smooth and creamy, then add one pint of apple sauce, and beat all together. A teaspoonful of vanilla is to be added when cold, and at the last, just before serving, whites of the eggs, beaten to a stiff froth, with a tablespoonful of sugar.

Scotch Baked Apples—Eight apples, eight tablespoonfuls of stale bread crumbs, eight teaspoonfuls of sugar, six teaspoonfuls of orange marmalade, one and one-half tablespoonfuls of butter. Core the apples, fill the cavities with the sugar, half a tablespoonful of butter and the marmalade. Place them in an agate ware baking pan, pour a little hot water around and bake. Meanwhile, melt the remaining tablespoonful of butter, mix

it well through the bread crumbs, spread them out on a pan and set in the oven to brown, stirring well. When the apples are done, sprinkle the crumbs over the top, dust with sugar and serve hot with cream.

Apple Trifle—Take smooth, well-sweetened apple sauce, chill, put in a deep glass dish, and heap whipped cream over the top; very delicious.

Creamed Apple Pie—Three cups of sliced apples, three-fourths cup of brown sugar, grated rind of one-half lemon, juice of one-half lemon, two cups of boiled custard, line a deep pudding dish with pastry. Add apples, sugar and lemon, cover with the upper paste and bake forty minutes. When done, lift the crust and pour in the boiled custard, return cover and serve ice cold.

Apple Pudding—Half fill an earthen dish with good cooking apples, pared and cut in pieces. Do not put any water in except that which adheres when washing them. When the bread dough is light take a piece large enough to cover the apples. Do not knead or roll out, simply pull and stretch over the apples, lay a clean cloth over, turn a plate over it and tuck the corner of the cloth closely over all. Put dish on top of stove, but where it will not be too hot, let it steam four hours. When done, take

off crust, spread apples on it, and eat with butter, sugar and cream.—Helen A. Layman, Massachusetts.

ABOUT WINDOW CURTAINS.

A room is often made most unpleasant by over elaborate, poorly hung window curtains. A curtain should serve its purpose as a protection of the interior of the house from the prying gaze of the outsider, and should be of a close woven material and arranged in straight hung lines. If more light and air is desired than this method of hanging seems to give the curtains may be pushed back or temporary cords of washable material may be used.

Heavy silk or velvet cords or the ribbon arrangement are not suitable in the small home and serve only as dust collectors. The easily moving curtain is a better solution of the problem. The casing in which the rod runs should be wide enough to prevent sticking and should be well made to prevent sagging. The proper length of the curtains of a room should be uniform.

Elaborate or expensive lace or silk window hangings are unnecessary. Simple, well hung curtains of muslin, net, scrim, voile, swiss or soft cheese-cloth, finished with a plain hem or a narrow lace edging will give the house a well balanced, suitable appearance within and a simple, dignified atmosphere throughout. Besides the desirability of these features the saving of time in their care and laundry and in the initial cost will appeal to every one. The curtains for a simple house should average not more than a dollar for each window.—Louise Peck.

NUTS AS FOOD.

Nuts form a very concentrated form of food, in many cases more so than cheese, and when rationally used they are readily digested and form a part of a well-balanced ration. Nuts are plentiful in many parts of this country and should not be allowed to go to waste.

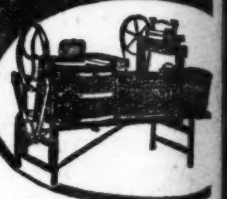
GET RID OF HUMORS AND AVOID SICKNESS

Humors in the blood cause internal derangements that affect the whole system, as well as pimples, boils and other eruptions, and are responsible for the readiness with which many people contract disease.

For forty years Hood's Sarsaparilla has been more successful than any other medicine in expelling humors and removing their inward and outward effects. Get Hood's. No other medicine acts like it.

A.B.C. POWER WASHER

14 DAYS FREE



Thousands of Women Delighted

The A. B. C.—"world's best"—Power Washer, run by your engine or motor, pays its own low price in a few washings. Clothes cleaner, whiter than by hand. No injury to delicate fabrics. Greatest time and labor saver for women.

Sliding Power Wringer, Adjustable Height Platform, Noiseless Belt Drive, All Steel Base, etc. Guaranteed.

The A. B. C. Alco Washer

Occupies less space. Has Swinging Power Wringer. Large Tub. Gasoline or electric motor.

Write for 14 Day FREE Trial Offer. Illustrated Booklet and send name of your local dealer.

Altorfer Bros. Co.
Dept. D 11
Rockford and Peoria, Ill.

JOLLYING CARDS.
Give you "A standin'" with the girls in the pack. Wallace, 692 N. 4th Street, Estherville, Iowa.

Big Sleeping Doll FREE



This fine sleeping doll is nearly two feet tall, and is all the rage. She has slippers, complete underwear, stockings, etc. Dress is very prettily made, half length, and trimmed with lace; also has a little chateleine watch with fleur-de-lis pin. You can dress and undress this doll just like a real baby. Has curly hair, rosy cheeks, beautiful eyes, and goes to sleep just as natural as life when you lay her down.

This doll free for selling only 20 of our magnificent art and religious pictures at 10 cents each. We trust you will give an extra surprise gift for promptness. Send no money—just your name.
PEOPLE'S SUPPLY CO., Dept. R. W.
St. Louis, Mo.

A pound of walnuts will produce almost three times as much energy as a pound of steak. Such being the case, would not the use of a considerable quantity of walnuts, butternuts, and hickory nuts be a valuable addition to this winter's supply of provisions? The gathering of nuts is fine sport for the children.

TANKSGIBBIN'.

Oh, be jolly! Oh, be tankful! Foah de possum in de pot,
An' we heah de steam a-rappin' de lid tin.
Now my Lizzie's settin' table, an' so wurries hab we got,
Foah a happy time, yo' know, an' settin' in.
All de while my Lizzie's cookin', a blessin' seems tu cum,
Foah she's ebber, ebber singin', dat is why.
An' de dinnaah has its seasonin'—and heah's de whole sum:
Yo' kin make dis life mos' cheerful if yo' try.
St. Louis. ALBERT E. VASSAR.

PATTERNS FOR RURAL WORLD READERS.



In ordering patterns for Waist, give bust measure only; for Skirts, give waist measure only; for children, give age only; while for patterns for Aprons say, large, small or medium.

9879—Ladies' Dressing Sack.

Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 2½ yards of 36-inch material for a 36-inch size. For cap, ¼ yard 27-inch net, all over embroidery or lawn, percale, dimity, dotted swiss and silk are suitable.

1139—Girls' Dress.

Cut in 4 sizes: 6, 8, 10 and 12 years. It requires 2½ yards of 36-inch material for an 8-year size.

1114—Ladies' House Dress.

Cut in 5 sizes: 34, 36, 38, 40 and 42 inches bust measure. It requires 6 yards of 40-inch material for a 38-inch size. The skirt measures 2 yards at its lower edge.

1142—Ladies' Sewing Apron and Bag Combined.

Cut in one size—medium. It requires 1½ yards of 36-inch material.

1117—Ladies' Skirt, With or Without Tunic and Girdle.

Cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It requires

2½ yards of 44-inch material for the skirt, and 2 yards for the tunic and girdle, for a 24-inch size. The skirt measures 2 yards at the lower edge.

1130-1129—Ladies' Costume.

Waist, 1130, cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt, 1129, cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It requires 8¼ yards of 44-inch material for a 36-inch size. Two separate patterns, 10c each.

1135—Ladies' Dress.

Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 7½ yards of 36-inch material for a 36-inch size. The skirt measures 1½ yards at the lower edge.

1128—Ladies' Dart Fitted Apron.

Cut in 3 sizes: Small, medium and large. It requires 3¼ yards of 36-inch material for a medium size.

1111—Ladies' Kimono.

Cut in 3 sizes: Small, medium and large. It requires 4¼ yards of 36-inch material for a medium size.

1127—Girls' Dress.

Cut in 3 sizes: 12, 14 and 16 years. It requires 4¼ yards of 36-inch material for a 14-year size.

1115—Girls' Dress.

Cut in 4 sizes: 4, 6, 8 and 10 years.

THANKSGIVING AT GRANDMA'S

I like to be at Grandma's when Thanksgiving comes around. For there is where the turkey and the pumpkin pies are found. There is where the turkey gobbler goes a strutting all about—And he'll rush right up behind you, if you're not a-looking out. But when he's in the oven, with the dressing stuffed inside, It makes your mouth all water, and your eyes pop open wide. As you see him getting browner, and smell the gravy, too, You get so very hungry, that you don't know what to do; And when the dinner's ready, and you're sitting in your place, You bow your head a moment, while Grandpa offers Grace. My! what a splendid dinner! Your plate is piled up high; You never can quite eat it, but you know you're going to try. A great big piece of white meat, and a dark one just as big; And now you begin eating, like a hungry little pig. A dish of red cranberries, and a piece of pumpkin pie— Do you want to go to Grandma's? You do? Well, so do I.

ALBERT M. BUCHANAN.

Kansas.

FOUR THINGS THAT CAN BE MADE FROM COCOA.

Cocoa Doughnuts.—One-half cup sugar, one egg, one-half cup milk, one-quarter teaspoonful salt, one-quarter teaspoonful cinnamon extract, two cups flour, one-quarter cup cocoa, two teaspoonfuls baking powder. Mix in the order given, sifting the baking powder and cocoa with the flour. Roll to one-third of an inch in thickness, cut and fry.

Cocoa Sponge Cake.—One and one-half cups sugar, one-half cup cold water, three eggs, one teaspoonful vanilla, one-fourth cup cocoa, one and three-fourths cups flour, two teaspoonfuls baking powder, one teaspoonful cinnamon. Beat the yolks of the eggs light, add the sugar, vanilla, and water; beat again thoroughly; then add the flour with which the baking powder, cinnamon, and cocoa have been sifted. Fold in the stiffly beaten whites of the eggs. Bake in a rather quick oven for 25 or 30 minutes.

Cocoa Marble Cake.—One egg, one-third cup butter, one cup sugar, one-half cup milk, two cups flour, one teaspoonful vanilla, two teaspoonfuls baking powder, and three tablespoonfuls cocoa. Cream the butter and add the egg, sugar, and vanilla; beat thoroughly, and flour (in which the baking powder has been mixed) and milk, alternately, until all is added. To one-third of the mixture add the cocoa and drop the white and brown mixture in spoonfuls into small, deep pans, and bake about 40 minutes in moderate oven.

Cocoa Biscuit.—Two level tablespoonfuls sugar, four level tablespoonfuls cocoa, one-half teaspoonful salt.

It requires 3 yards of 36-inch material for an 8-year size, with ¾ yard for the tucker.

1120—Dress for Misses and Ladies.

Cut in 3 sizes for misses: 14, 16 and 18 years, and in 4 sizes for ladies: 36, 38, 40 and 42 inches bust measure. It requires 6¼ yards of 44-inch material for a 36-inch size, or 4¼ yards for tunic and overblouse and 2½ yard for sleeve and flounce. Two yards of lining is required for the skirt.

These patterns will be sent to RURAL WORLD subscribers for 10 cents each (silver or stamps).

If you want more than one pattern, send 10 cents for each additional pattern desired.

Fill out this coupon and send it to COLMAN'S RURAL WORLD, 718 Lucas Ave., St. Louis, Mo.:

Pattern No.....Size.....Years

Bust.....in. Waist.....in.

Name

Address

HAROLD GREGSON 1915 ART PANEL CALENDAR

FREE



This beautiful panel is reproduced in 12 colors from the original painting by Harold Gregson, the famous New York artist. The accompanying illustration suggests the beautiful face and figure, but does not give even a faint idea of the exquisite coloring. The gown is a deep red, almost impossible to describe. The single rose the girl is holding, is of the same wonderful shade.

The panel is 36 inches long and 7 inches wide. It has absolutely no advertising on the front, the calendar being printed on the back. This beautiful panel is a wonderful reproduction of the original painting. Framed or unframed, it makes a picture to be proud of and one you will enjoy for years.

We send it securely wrapped in a mailing tube to prevent creasing or injury. We want it to remind you that

American Farming is the brightest, liveliest, most interesting Farm Paper published. Departments for mother, the boys and girls. Enjoyed by the whole family all the year around.

FREE We will send one of these beautiful art panels free and postpaid to any address in the U.S. for one new or renewal yearly subscription at 25 cents.

To our long term subscribers, and others who want a copy, we will send the Art Panel, postpaid for 10c silver or stamps (coin preferred) to cover wrapping and mailing. Send early. Supply limited. **American Farming, 14 Art Dept., Chicago, Ill.**

HAND BAG FREE

Seal grain Hand bag, fancy ornamented frame, 3 pockets inside fitted complete with mirror, bottle and coin purse. Just send your name and we send you 50 beautiful large art pictures to sell at the such. When sold send us \$2.00 and complete hand bag outfit is yours. We give 40 beautiful postcard as extra gift for promptness.



People's Supply Co., Dep. B-716 Lucas Ave., St. Louis

three level teaspoonfuls baking powder, one pint (two cups) sifted flour, two level tablespoonfuls butter (or lard), two-thirds cup milk (or enough to make a firm but not stiff dough). After sifting the dry ingredients together, add the butter which has been rubbed with the tips of the fingers. Stir in the required amount of milk. Turn out on slightly floured board, roll or pat out the desired thickness, place close together in a pan and bake in a very hot oven for 10 or 15 minutes.

USES OF COMMON SALT.

A little salt thrown on the flame will clear it for broiling meat. Marble washstands that have become discolored may be scoured first with wet salt, and if that does not remove stain, with salt and lemon mixed.

Salt mixed with vinegar is excellent for cleaning copper utensils.

To remove iron rust wet the spots with salt and lemon juice and hold the material over steam of a tea-kettle, then put out in the sun.

Salt and lemon mixed will often remove ink stains that are fresh.

To set colors in cotton materials soak before washing in strong salt water.

A pinch of salt added to cream will make it whip more quickly.

To beat the white of egg quickly add a little salt. In making mayonnaise the salt should go in last.

Grease on top of a hot stove can be quickly rubbed off by putting salt on the scrubbing brush.

In scouring boards strong salt water or wet salt is a great cleanser.

In freezing weather if windows stick they can be quickly opened by pouring hot salt water over the casings. This is also the quickest and best way to remove ice from slippery pavements or steps.

To revive withered flowers plunge the stalks in boiling water and leave them in it till it becomes cold. Then cut about one inch from the ends of the stalks.

MARKET REPORT FOR THE WEEK

CATTLE—Steer supply was of liberal volume, but quality was not very good, although averaged about up to Monday's standard. Bulk of the showing was of medium to common grade, there being only one load of strictly good beefs on sale. Some medium-weight long yearlings at \$10.50 were top. Shortly after noon the discounting became more pronounced and toward the close of the session the greater part of steers were in sellers' hands with bids a flat quarter lower than the early trade. By all means it was a buyers' market.

Just how much lower the heifer market was during early hours, it was a bit difficult to determine, but when the first few loads had changed hands, a decline of 15¢ to 25¢ was apparent and even then it was mighty slow selling. Trade in cows did not show much change, in fact, just a slightly stronger tone was evident, where better grades of cows were concerned. Canners and cutters also found a steady market. Bulls sold about steady, with a fair supply available.

Owing to the federal quarantine, prohibiting the shipment of cattle from

the market, the stocker and feeder division continued closed.

Few Texas or Oklahoma steers of any kind offered, practically none were included in the day's supply. Some Oklahoma steers that got in late sold at \$6.85. There was not a very good demand and packers were in a bearish humor. They sold about 15¢ lower. Market on canners and she stuff was easier and lacked a great deal of snap.

HOGS—A liberal supply, considering prevailing conditions, and as a result there was a heavy slump in the trade. Not far from 12,000 hogs were received, and but four buyers are operating.

Several loads of \$7.60 represented the top of the market, while the bulk of the good hogs went at \$7.30 to \$7.50. Pigs and lights are still neglected.

Shippers should keep the pigs and lights in the country for the present. Good hogs, with little weight, found sale at \$7.50 and better, while mixed and plain grades went at \$7.20 to \$7.45 and throw-out rough packers—that is, old sows and stags that were sorted out of the loads—went at \$6.75 to \$7.00, and they were sorted out closely.

Packers purchased a pretty fair grade of hogs at \$7.35 to \$7.50, and any that went above those figures had to be strictly good quality in every respect. Best grade of lights found sale at \$7 to \$7.25, best pigs and fair-grade lights at \$6.50 to \$6.90 and poor grade pigs at \$6 to \$6.40. The close of the day found the market very weak and many hogs still in the hands of the sellers, some of which had not received any bids.

SHEEP—Prices on lambs were about 50¢ lower than the Monday basis, and

the sheep trade was around 40¢ lower, and, furthermore, it was a dull market.

Most of the good lambs sold at \$8.75. Others that were not quite so good went at \$8.40 to \$8.65, and fair kinds \$8 to \$8.35, while culls and other thin ones sold largely at \$7.50. There was a string of yearlings that averaged 75 pounds which sold at \$6.75 and 114 head that weighed 88 pounds that went at \$7.50.

Most of the mutton sheep went at \$5.50, which is the same price they were bringing week before last, when the market closed. Choppers went around \$4.50 in most cases and canners \$3.50 to \$4.00. Bucks sold at \$4.50 to \$4.75, which is the highest they have this fall.

HORSES—The auction began early with a right good offering of all grades, but buyers from the Eastern states were not aggressive and they did not pay good prices for those they purchased. The Southern trade was poor, in fact there was no demand for horses whatsoever from this section and the animals on hand suitable for this section either sold at greatly decreased values or found no outlet whatever. The best call came for war animals and all these that were suitable to buyers sold as fast as they could be inspected.

MULES—A firm at the National Stock Yards is now filling a large order for war mules, but very few of the animals to fill this order are being taken off this market and shippers are not helped materially by this contract. The only kinds dealers here are taking are a few miners and big mules, but there has been no material change in the trade in cotton mules and the trade in these is mighty slow.

that the legislative committee of the national grange be directed to oppose the proposition at Washington. The National Grange unanimously approved.

At the last session of the National Grange, a committee was appointed to consider the erection of some suitable memorial to the memory of the late "Father" O. H. Kelley, one of the founders of the order of Patrons of Husbandry. The committee reported that better than any memorial in brass or stone would be the raising of a fund in the various grange states for educational or grange extension purposes, to be known as the Oliver H. Kelley Fund, and this idea will be carried out by the grange. In this connection it may be said that a resolution was adopted to arrange for some suitable celebration of the 50th anniversary of the National Grange which will occur in 1916, the celebration to take place at the place of meeting of the national grange in that year. New York has a claim on this anniversary meeting as it was in that state that the first subordinate grange was organized by Mr. Kelley. That grange—Fredonia No. 1—is still in existence and has a membership of about 600. Missouri will also have a claim on the anniversary as in that state the original declaration of purposes was adopted.

The National Grange is a conservative body and believe in conserving its financial resources. Those resources are not far from \$100,000. It is proposed to make a permanent investment in some safe bonds or first mortgages of this amount so that there may be a substantial financial backing to the National Grange, the income of the fund to be used for such purposes as the grange may direct. This is sound policy and meets with general approval.

Two matters came before the grange in which there was unusual interest. These were the selection of the next place of meeting and the election of one member of the executive committee. California has been extending its invitations regularly for the past few years for the grange to meet in that state, and this year it had the additional inducement of the Panama-Pacific Exposition. The interest which the various states take in the securing of the annual convention is seen by the fact that 10 states wanted the meeting in 1915. However, the contest was strictly narrowed down to California and Missouri, with California the winner by a vote of 43 to 10. The place is not selected until later by the executive committee, but it is a good guess to say that Oakland will have the honor of being selected, providing satisfactory arrangements can be made.

At the next annual session the full quota of officers will be elected, elections occurring biennially. At this session one member of the executive committee only was elected. The honor went to State Master W. M. Cady of Vermont. The committee will then consist of National Master Oliver Wilson, ex-officio, C. S. Stetson of Maine, A. B. Judson of Iowa, and W. M. Cady of Vermont.

Members of the order are interested in the work of the degrees, especially of the Seventh, the highest that the grange confers. This year the Seventh degree class members numbered 669. The largest class ever receiving this degree at one session of the National Grange was that of last year at Manchester, N. H., when over 5,400 were enrolled.—J. W. Darrow.

The Union Stock Yards and the packing houses, Chicago, scrubbed and disinfected after nine days of quarantine in the government and state fight against the hoof and mouth disease, opened for business Sunday, midnight, all parts of the industry having been declared thoroughly sanitary and rid of any danger of spreading the disease.

This Splendid Watch Free

Our fully guaranteed American made Watch is highly engraved, stem-wind, stem set, simulated gold finish; desirable for ladies or gents; late model, fancy bevel, new design. Given free for selling only 10 large, beautiful and religious pictures at 10¢ each. We trust you will picture until sold. Send name today. We give a splendid job for promptness.



PEOPLE'S SUPPLY CO., Dept. B. W., ST. LOUIS, MO.

Farmers' Classified Department

70,000 PAID CIRCULATION

RATE ONLY TWO CENTS A WORD

Colman's Rural World has a family of over 70,000 paid in advance subscribers every week. This means that at least 350,000 farm folks are readers of these columns. Figure the cost of sending each of these readers a personal letter each week and then compare that cost with the low rate at which you can reach them ALL through the Classified Columns below. Count up the words in your advertisement, including initials and numbers which count as words, and multiply by two and you will quickly appreciate how low the cost is to reach these 70,000 buyers every week. No advertisement less than 10 cents accepted—and no fakes under any circumstances. Cash must accompany all orders.

ADDRESS,

Colman's Rural World Advertising Department 718 Lucas Av., St. Louis, Mo.

FARMS AND LANDS.

MISSOURI LAND for sale, 3 to 5 dollars acre, 10 dollars down, 5 dollars month. Write for list. Box 692, Mt. Vernon, Ill.

DELAWARE FARMS, fruit, livestock, alfalfa. Best land near best markets. Address, State Board of Agriculture, Dover, Delaware.

FOR SALE—Deeded land, desert and homestead entries, near R. R. station. \$10 per acre. Wm. Tow, Sterling, Colo.

LIVE STOCK.

BERKSHIRES—The large prolific kinds. Pigs, \$10 each. H. H. Shepard, Pacific, Mo.

BIG TYPE POLAND-CHINAS, Best breeding, prices low.—H. O. Linhart, Lohman, Mo.

REGISTERED HAMPSHIRE HOGS, best quality, reasonable prices. Frank Franklin & Sons, Vinita, Okla.

PURE-BRED registered Red Polled cattle, young stock for sale. Cedar Valley Farm, E. R. No. 2, Leslie, Mo.

BIG TYPE POLAND-CHINA serviceable male spring pigs. Prize winners. Price reasonable. C. O. Fritschle, Bogota, Ill.

GUERNSEY CALVES, 10 heifers, 2 bulls, beautifully marked, \$20.00 each crated for shipment anywhere. White Edgworth Farm, Whitewater, Wis.

BIG TYPE POLAND-CHINA boars, \$10 to \$20; gilts bred to a son of A Wonder 143421. All extra good size and good feeders. Satisfaction guaranteed. E. B. Luttrell, Madison, Mo.

SEED AND NURSERY STOCK.

SWEET CLOVER—Order now. Mrs. J. T. Mardia, Falmouth, Ky.

NEWTON NURSERIES, Newton, Mississippi. Best varieties; low prices; catalogue free.

SWEET CLOVER SEED—Pure white and biennial yellow. Special prices for autumn shipment, sent on request. Bokhara Seed Co., Box D, Falmouth, Ky.

BEEES AND HONEY.

HONEY—Fancy light amber from alfalfa and sweet clover, per 5 60-lb. cans, \$11.00, for \$9 lbs., \$5.75. Bert W. Hopper, Rocky Ford, Colo.

BEST QUALITY new clover honey, 30-lb. can, \$3.45, two or more cans, \$3.30 each. Sample 10c. Price list free. M. V. Facey, Preston, Minn.

AUTOMOBILE.

CYLINDER rebored, including piston and rings, \$7.00 to \$11.00. Sterling Engine Co., 821 S. Clinton St., Chicago, Ill.

POULTRY.

BIG DARK VELVET ROSECOMB Reds, bargains. Sunnyside Farm, Havensville, Kas.

FIFTY MAMMOTH TOULOUSE geese at \$7.50 per trio. Charles Stauder, Nokomis, Ill.

BLACK LANGSHAN pullets, 6 for \$4, until Dec. Mrs. Olive Roubush, Republic, Mo. R. 2.

ROSE AND SINGLE COMB REDS, utility pullets, \$1.50, \$2.00 and \$3.00 each. Smith's Poultry Yards, Kingman, Ind.

FOR SALE—Fine Rose Combed Brown Leghorn Cockerels. Kulp strain, \$1.25 each. Myrtle Johnson, Windsor, Mo. R. 21.

650 BARRED ROCKS, bred from Iowa King won champion sweepstakes at Iowa State Show, 1914. A. D. Murphy & Son, Essex, Iowa.

REDS—BUFF ORPINGTONS—Big boned, dark red, and big golden Buffs, from \$20.00 eggs. Sell cockerels cheap; egg laying strain. Ava Poultry Yards, Ava, Mo.

FANCY BARRED ROCKS for sale, E. B. Thompson Ringlet strain, single birds, trios or pens mated; fifteen years' experience breeding Barred Rocks. I guarantee satisfaction. J. H. Hart, Thomasville, Ill.

DOGS.

FOR SALE—One pair of seven-months-old hounds, pups at \$15. C. W. Muma, St. Elmo, Ill.

MILCH GOATS.

MILCH GOATS. Write George Wickham, 3914 East Central, Wichita, Kansas.

HELP WANTED.

\$65.00 to \$150 MONTH paid men and women. Government life jobs. Common education sufficient; 2,000 appointments every month. Write immediately for free list of positions. Franklin Institute, Dep't. N 167, Rochester, N. Y.

AGENTS.

WILL PAY reliable woman \$250.00 for distributing 2,000 free packages Perfumed Borax Washing Powder in your town. No money required. W. Ward & Co., 214 Institute Pl., Chicago.

MISCELLANEOUS.

HAIR SWITCHES made of your own cut hair or combings. Write, Mrs. R. L. Hays, Florence, Ark.

FREE—The Mining News, devoted to a reliable mining investment and mining news will be sent three months free to get acquainted. The Mining News, 2541 W. 37th Ave., Denver, Colo.

THE NATIONAL GRANGE NOW IN SESSION.

(Continued from Page 5.)

paid for rather than saddle a debt on coming generations which they had no part in contracting. He advocated an educational test for immigrants seeking naturalization. They should be required to be able to read and write the English language and stand examination in the constitution of the United States and of the state in which they seek citizenship. Regarding the interests of peace, Mr. Wilson supported the principle laid down by the President of the United States, that of strict neutrality in the present situation.

The National Grange does not hesitate to deal with the large questions of the day whether they be directly or indirectly connected with agriculture. Mostly they have an indirect yet nevertheless a very real connection with the interests of the farmer. Among those considered at this session farm credits, co-operation, government ownership of public utilities, woman suffrage, improvement of the highways and taxation stand well to the front.

A resolution introduced by T. C. Atkeson of West Virginia early in the session may be taken to represent quite accurately the sentiment of the grange in regard to the perplexing question of farm credits. Referring to the experience of other nations government aid as to farm credits has been shown to be necessary in reducing the high cost of farm loans and to the efficiency of food production. The Buckley-Hollis bill partially meets the requirements of the farmers, in the opinion of Mr. Atkeson. It provides but for a modicum of government aid. Something more substantial was needed. No farm credit bill, said he, will meet either the needs of agriculture or the demands of the grange, which places in the hands of private capital the power to make interest rates on mortgage bonds without limitations of federal law.

The grange is opposed to the proposed removal of the rural mail carriers from the classified service, as is the apparent intention of the postal department at Washington, allowing the carrying of the mails to be let on contract as was the case of the star routes prior to the establishment of free mail delivery in rural districts. A strong resolution on this subject was introduced by the delegate from Washington state, asking that the present civil service system be continued and

SHEEP & SWINE FOR MOST MONEY

WATCH THE HOG'S HEALTH.

It is not commonly understood that hogs, owing to the unnatural and unsanitary conditions to which they are so often subjected, are often more or less unhealthy. It must be kept in mind that swine are used solely as food for human consumption. Why, then, are they kept in such unsanitary conditions? It is unhealthy, and a large amount of the cholera and other troublesome diseases are due to these conditions. We recommend well-ventilated stables, clean water, clean feed, etc., for the dairy cow, but we somehow have absorbed the idea that anything is good enough for the hog.



Tamworths Are One of the Best Breeds of Hogs for Bacon.

This is a mistake. The character of the treatment given will affect more or less the quality of the meat. It will undoubtedly affect the vigor and vitality of the animal, and we cannot expect first-class products from a diseased source. Give the hog plenty of fresh air, exercise and good food. Have the pens and yards comfortable, clean and well-drained. See that the hog pen is well-ventilated and full of sunlight. Give the hog a comfortable bed. It will pay in increased returns and in freedom from disease.—J. B. Henderson.

FOR THE COTTON FARMER WHO WILL RAISE HOGS.

Mr. C. C. French, secretary of the Southwestern Boys' and Girls' Hog Clubs, and a member of the advisory board of the Texas Industrial Congress, is earnestly urging the farmers, who intend to reduce their cotton acreage next year, to cultivate forage crops with which to fatten hogs for the market. In a letter to the congress, Mr. French says:

"I have read with much interest of the efforts that are being made to reduce the cotton acreage, but so far nothing has been done to show the farmer what he can substitute, profitably, for cotton, or how to procure live stock for feeding purposes.

"The situation reminds me of a story I once read; 'Once upon a time,' the story goes, 'the king of France decided to declare war on Italy, and called upon his generals and engineers for plans to get the army into Italy. When the plans were completed, the king said 'Now we will declare war.' Then the king's fool said, 'Your majesty, your plans for getting your army into Italy are all right, but where are your plans for getting your army out of Italy?' Then the king threw a chair at the fool, but war was not declared.

"So the cotton farmer must have plans for a 'way out,' if he goes into the scheme of reducing the cotton acreage, and planting other crops.

"If a cotton growing community wants to secure milk cows, let it form an organization and adopt the Moser Dairy plan as outlined by the Texas Industrial Congress; if it wants brood

sows, let them follow the example of San Angelo and Pecos.

"These two communities called a meeting of their chambers of commerce and business men, and a finance committee was formed; then every farmer who wanted one or more sows was invited to sign up for the number he wanted. The finance committee passed on each man's ability to handle the number of sows he ordered, and his ability to meet his obligations. Then a car of sows was bought and paid for by the finance committee; the hogs were dipped and inoculated to prevent them from taking cholera. They were sold at the market price for meat hogs, with cost of dipping, vaccinating and freight charges.

"I am glad to say that the Fort Worth Stock Yards and its allied interests have made arrangements by which communities that get together like Fort Stockton, Pecos, San Angelo and other points and act in conjunction with their chambers of commerce and banks can be supplied with high grade or registered hogs, which will be sent out properly immunized against cholera, under supervision of the State Sanitary Board."

STOMACH WORMS IN SHEEP.

When one of the flock presents a dull and listless look, dragging behind the rest as they move about, it is good business to watch it for a while. If its fleece is seen to be harsh and dry, if it shows a tendency to eat dirt, catch the animal, and while holding it quietly, turn up one of its eyelids and examine the membrane. Should this be found to be pale and colorless, it is pretty safe to conclude that parasites or worms are slowly and gradually but surely reducing the animal's vigor to the exhaustion point, and, if not attended to, the lamb or the sheep will die.

Gasoline is now recommended as the best remedy for these, including the stomach worm, the cause of such heavy losses in years past. The plan for administering this remedy is to take the sheep or lamb and separate it from the rest of the flock at night, keeping it in a dry and sheltered place, taking care that it gets neither food nor drink until morning. Then give it a drench made up of five or six ounces of cow's milk, with a tablespoonful of gasoline, in the case of a lamb, or of one and a half tablespoonfuls in the case of a grown sheep. Add to this one tablespoonful of raw linseed oil, and administer from a long-necked bottle. As soon as this remedy has been given the lamb may be turned out with the rest of the flock, and the following evening taken by itself and handled in the same way. If this treatment is continued for three successive nights and mornings it should effect a complete cure.

A strawy place is not the best for sheep to lie. Fill the wool with bits of matter that the buyers do not like, and for which they will sometimes dock the seller.

Where contagious or white scours appear readjust the ration, disinfect the hog lot and shelter, and physic the swine with epsom salts or castor oil.

The scoop shovel is the best implement for the preparation of corn for hogs feeding operations.

FARM CONGRESS TOUCHES ALL ANGLES OF FARM LIFE.

No part of the work of the recent Dry Farming Congress at Wichita, Kansas, had a more penetrating lesson for the general United States farmer from Florida to Oregon than the lectures by Dr. T. N. Carver, head of the Rural Organization of the United States Department of Agriculture, and professor of economics at Harvard University, on the subject of "Marketing and Rural Credit."

"All our improved methods will be of small value if some one other than the farmer gets the results," said Prof. Carver in the course of his address. "Since capital is coming to play such an important role in agriculture, the cost of credit is coming to be an important factor in the cost of growing crops. This again effects agricultural expansion precisely as does the price of farm products. That is to say, poor credit facilities and a high interest rate will depress agricultural production as surely as a fall in the price of farm products.

"How can a farmer possibly get credit on easy terms unless he has a good basis for credit? This question is asked more frequently than any other by skeptics on the subject of rural credit. Of course, there is only one answer: He can not. But it is too often assumed by people who pride themselves on their hard-headedness, and who fail to distinguish between hardness and impenetrability, that the only good basis for credit is property or collateral. Real financiers have always seen deeper than this, but many of the rank and file of those who deal in securities, credit, and collateral, are not financiers of any kind, either great or small, though they imagine that they are. They are sometimes unable to see beyond the things which clutter their desks and fill their pigeon holes. To such men, the suggestion that character may be a satisfactory basis for credit doubtless seems rather humorous."

Along almost similar lines Dr. E. Dana Durand, former director of the Census Bureau, but now professor of economics at the University of Minnesota, warned the country of the dangers which careless farming were making eminent. "Because the population in this country tends to overrun the food supply, it means an everlasting hustle if we get food enough," stated the former census head.

"We have had no reason to worry about the population outstripping agricultural products until within the last 10 years, when conditions have reached the danger signal point where we may become an importing instead of an exporting nation. We have got to be active and keep our wits or we will be falling behind in the race. In 1912 the production of cereals increased only 2 per cent, cattle and hogs fell off, but the population increased 21 per cent.

"For the first time in 1912 we imported more food products than we exported, and it looks more and more like we might continue. If it had not been for immigration the increase in population would have been only 14 per cent. And nine-tenths of the immigrants went into non-farming occupations. What are we going to do? Increase the acreage of land or get more out of the land? If I stood here and asserted that all of the land which is not under cultivation is in the West, you probably would believe I was stating a fact. The truth is, however, that there is a great deal of land in the East not under cultivation and it will have to be brought under cultivation. In a single state in the West there are 10,000,000 acres unused on account of the non-existence of moisture. We will get more per acre out of the land if we put more labor and more brains into the working of it. In Europe they put more of their land in food products. They get more out of an acre of land than we do, but the average quantity produced by a man in Europe is less than that of a man in Kansas. It is all right to make three blades of grass grow where one grew before if it does not take three men to do it.

"The main thing for us to do is to restore the balance between the food

KENDALL'S SPAVIN CUR

The old, reliable remedy you can depend on for Spavin, Chalk, Splint, Ringbone or any lameness. Thousands have proved it trustworthy. Get a bottle from your druggist. Price per bottle \$1.60 for \$5. "Treatise on the Horse" Free at drugist or from Dr. J. J. KENDALL CO., Kansas City, Mo., U. S. A.



LOCKET AND RING FREE

Gold plated Locket, 22-inch Chain. Set with 8 beautiful brilliants. Very handsome. Free for selling only 25 large and religious pictures of \$10 each. Gold filled Ring, set with 8 brilliants given for promptness. We trust you with pictures until sold, and give an extra gift for promptness. Send name today.

People's Supply Co., Dep. 716 Lucas Ave., St. Louis

supply and the population. We must induce more people to go on to the farms by legislation or some other way. We may have to force immigrants on to the farms by law. We lead the world in mining, manufacturing and other industries, but not in agriculture."

Along these lines went the trend of thought throughout the meetings. Almost every subject upon which a thinking farmer reads was brought out. Better government was one of the topics discussed, and Chas. S. Gleed, director of one of the big American railway systems, said: "No line of business or class of people could prosper unless agriculture was prosperous and that agriculture could not prosper unless political conditions were satisfactory."

The Women's Congress.

At the Women's Congress, the keynote was "To make farm wives happier and their children more contented." Mrs. Ada Wortman of Beatrice, Nebraska, in speaking of the social life of the farm described her experience as a farm owner and a farm manager. She said that in some ways "the men" of the neighborhood had discouraged the natural courses that women would follow in making life on the farm more interesting than in the city. The city woman does not realize what an enjoyment there is on the farm.

Mrs. Alberta Kepper of Winfield, Iowa, in discussing the "helpmate" maintained that "today, as never before, we feel the possibilities of united interests, and a harmony of ideas are in the home. Then there comes sympathy into this hardened old world. Not in a day can we hope for this ideal to come into flower over all the world. There must be a time for ripening of thought, a time for development that man and his helpmate may attain greater happiness when they go in hand, guided by the star of hope. Their achievements must be shared, and their glory must be appreciated by both no less than their sorrows, but when the wife is a good counsellor, a friend and companion, the birthright of the woman and the world in general, reaps its reward."

"Housekeeping as an occupation should be ranked as high as any vocation or profession," declared Mrs. G. H. Randlett, a South Dakota delegate to the congress. "Training for a good housekeeper is as essential as for any other line, and a good housekeeper overcomes just as many difficulties as any professional man for upon her work depends the mental, physical and spiritual future of the nation's citizens. System should be carried out in every household for only through system can economy be practiced and when economy is not a watchword, a howl arises about the high cost of living. Women ought to be willing to learn more about housekeeping. They ought to study the method of taking care of their homes and see if there is not an easier way or a cheaper way that would bring the same results.

"The 'big business' of housekeeping is one institution against which there is no trust laws, and against which there will be no restraining legislation, so the field is open, competition is wiped out and a genuine trust can be formed where it will not do any harm. Let system and organization be the watchwords of a good housewife and all will be well in that home."—Reported by Douglas Malcolm of the International Harvester Company of America.

POULTRY RAISING FOR FUN & PROFIT

NATIONAL EGG-LAYING CONTEST RECORDS BROKEN.

The tremendous interest which has been manifested and the attention given by breeders everywhere during the past few years to selection and breeding for egg production is responsible for the great showing being made by the 1,000 hens in the National Egg-Laying Contest at the Missouri State Poultry Experiment Station. Previous records are already broken and it seems that a beautiful White Leghorn hen from Nebraska is almost certain to beat the record made by the famous hen, Lady Showyou, 281 eggs. The hen record has already been beaten by 181 eggs, and we have one month yet before the contest closes. This record is made by the English White Leghorns. A Barred Rock from Iowa, a White Wyandotte from Pennsylvania, and a Black Orpington from Nebraska have already surpassed any record made by those varieties in any of our previous contests. Others also seem destined to break previous records made by their varieties before the contest closes. Notwithstanding handicaps, a hen from New Zealand is among the nine highest hens. The average number of eggs laid by each hen for the 11 months is 155, which includes good and bad. A complete report of the contest will be published as soon as it is concluded.

How It Was Done.

The hens have all been housed in the fool proof shutter front poultry houses. Each house is 8x12 feet with a partition in the center and ten hens on each side. The method of feeding is as follows:

"Equal parts of corn and wheat in spring and fall. Two parts corn and one part wheat in winter months, and one part corn chop and two parts wheat in the hot summer weather. Ground oats were fed in a hopper to take the place of the dry mash usually used. The oats were prepared by running them through an ordinary feed mill, hull and all. With each 100 pounds of oats we mixed ten pounds of dry beef scraps, one pound of ground charcoal, and one pound of salt, free

from lumps. When sour milk, butter-milk or separated milk is available, we use that and prefer it to beef scraps. If the ground oats are not available, we use equal parts of wheat bran, shorts or middlings, and cornmeal with the beef scraps, charcoal, oystershell, and salt as stated. The ground feed is kept before the hens at all times. The grain is fed in a six-inch litter in the following quantities:

Each morning one pint to ten hens, and at night, one and a half pints to ten hens. Provide some green food, and keep the yards sweet by cultivation. We have grit, oyster shell and fresh water always before the hens. Each afternoon we give the hens a moistened mash, all they will eat in 30 minutes. Use the corn meal, bran and middlings for this purpose, and moisten it with milk or water. This is an important part of the rations for laying hens. Don't neglect the moistened mash.

This is a very simple method of feeding laying hens and there is not much danger of overfeeding them if they have been properly bred. For breeding stock we would recommend a ration composed principally of corn, wheat and oats, and no mash or beef scraps. Provide plenty of green food and compel the breeders to take plenty of exercise. This will enable you to get eggs which are fertile and which will hatch strong, vigorous chicks which will live. Remember that the breeding stock should not be fed so freely and compelled to take more exercise. Feed more whole grain to the breeders and avoid much mash or beef scraps.

Breeding Tells Again.

The Barred Plymouth Rock hen mentioned above is a very well marked specimen. She is better than 50 per cent of the hens found in fanciers' yards. This is another point in favor of trying to breed good colored and shaped birds and combining in them the qualities of egg production. We also have two Leghorn pullets hatched in February that were bred from prize winning birds at last fall's poultry shows. One of these February pullets has laid 85 eggs so far, and the other 82 eggs. Both were hatched, matured and laid this number of eggs since February of this year. A very good record for pullets nine months old.—T. E. Quisenberry, Mountain Grove, Mo.

THANKSGIVING TURKEY UNAF- FECTED BY THE LIVE STOCK QUARANTINE.

The rise in price of poultry of all kinds which is reported to have taken place in various states cannot, in the opinion of experts in the United States Department of Agriculture, be in any way attributed to the outbreak of the foot-and-mouth disease. This disease does not affect poultry at all, and the federal quarantine of various states—14 in all—now lay no embargo upon shipments of poultry. For instance, Rhode Island can still send out her Thanksgiving turkeys, although no cattle, sheep or swine can leave her territory.

It is true that when a case of foot-and-mouth disease is found upon a farm, that farm is absolutely quarantined by the state or local authori-

ties. No produce of any sort can leave it, the owner is not even permitted to drive his horses on the public highway, and in some cases his children are not allowed to go to school until the exposed stock have been done away with and the entire premises thoroughly disinfected. Since the disease, moreover, is readily communicated from farm to farm by cats, dogs, poultry and human beings, the local authorities exercise their own discretion in determining what restrictions should be placed upon shipments of produce from the area in the immediate vicinity of the infected farm.

These areas are so limited in extent, however, that the amount of poultry that may thus be prevented from reaching the Thanksgiving market is an inappreciable percentage of the total supply. Poultry from the uninfected areas in the various quarantined states can be moved freely without the least danger of spreading the disease or of injuring the health of the consumer.

HOUSING THE WINTER LAYERS WITHOUT CROWDING.

One problem that is confronting many farmers at this time is the housing of the winter layers. During the spring and summer months twice the number of fowls can be kept in a poultry house that can be housed in the same house in the winter time; consequently, many farmers make the mistake of keeping as many hens over winter as can be crowded into their houses during the latter part of the summer, when the fowls are in the houses only at night. But when the cold wintry days roll around is usually when his troubles begin. An overcrowded poultry house can never be ventilated right, and consequently the hens are apt to get colds, roup or some other disease peculiar to poultry during the winter months. Then, too, he will want to confine his hens in the poultry house during the coldest days, and this will prove to be a somewhat unsatisfactory proceeding if the poultry house is crowded to the limit.

First of all, therefore, we want to make sure that we have no more hens to house over winter than our houses will accommodate. It is far more profitable to have less hens than our houses could be reasonably expected to hold, than more. At least three square feet of floor space should be allowed to each hen, or in other words, a 10x15 foot poultry house will not comfortably house over 50 hens.

Ventilation is especially important. Unless a house is properly ventilated, the air will soon become foul and damp, which will surely result to the detriment of the health of the fowls, and the results will also have a marked influence on the size of the egg basket. The first steps in ventilating a poultry house should be the closing up of all cracks or holes that can admit the least draft. Next the top part of one or several windows should be removed and muslin or canvas tacked over the opening. This will admit all the fresh air at the top of the building, and if the house is absolutely tight all around no draft can come in the opening thus made. The reason is obvious. The air that is already in the house acts as a buffer. Before any more air

\$18.30 PER HORSEPOWER
Can you buy a horse for \$18.30? No! Yet you can get a six horsepower **DETROIT FARM ENGINE** for \$18.30 per horsepower. Runs on Kerosene, Gasoline, Alcohol or Distillate. Saws wood, grinds feed, pumps, etc., does any job around the farm. Only 3 moving parts. No cams, gears, sprockets or valves. Positive satisfaction ten year guarantee. \$9 day money back trial. We want farmer agents everywhere. Write for particulars. **Detroit Engine Works** 27 1/2 Bellevue Ave., Detroit, Mich.

Breeders

BARRED PLYMOUTH ROCKS
Fine, large and well-barred, \$1.00 each if 5 or more are ordered. Also, Mammoth Bronze Turkeys. **Mrs. H. C. TAYLOR, Roanoke, Mo.**

POLAND CHINAS
Big-Type Spring Boars & Glits Yearling Boars, fall Pigs and Angus Cattle. **J. P. Vissersing, Box 1, Alton, Ill.**

DUROC-JERSEY BOARS
High-class spring boars ready for service. Proud Col., Cherry Chief, Crimson Wonder breeding. Come and see them, or address **AMBERSTON FARM, Edgemont Station, East St. Louis, Ill.**

could enter the building it would have to push this air out at the rear, but as the house is absolutely tight all around there is no place for this air to escape, and consequently no wind can enter the building in gusts through this opening. The muslin covering over the opening keeps out all rain and snow. The result is plenty of good fresh air that is so essential to the health of the fowls.

The hens are far better off if confined in the house all day long in the coldest winter days, than if allowed to roam around outside in the snow. The house should be made as comfortable as possible for them. In addition to providing plenty of light and fresh air, the door should be covered with several inches of finely-cut litter. Straw will answer nicely. All the grain feed should be thrown in this litter, in order to make them scratch for it, as this is probably all the exercise they will get when confined in a house all day long. The litter should be renewed frequently.—J. A. Reid, Pennsylvania.

Be sure that the roof of the hen-house is water-tight and the walls wind-tight, or there is likely to be trouble early in the winter.

Hens that are afraid of the caretaker and fly every time he approaches will never lay as well as those which are on friendly terms and have found they can trust the men and women who work around them.

Fresh air is one of the greatest aids to health that poultry can have, and lack of it will always cause trouble. Therefore, provide good ventilation in all poultry buildings, but do not allow drafts to blow on the fowls.



At This Thanksgiving Time Turkeys Are Worth Big Money and Fortunate Is the Farm Wife With a Big Flock.

IN THE ORCHARD AND THE GARDEN

WINTERING SHRUBS AND ROSES TO WINTER COLD WEATHER.

While lilacs, snowballs, and certain other shrubs should be let alone during the winter, being neither trimmed nor covered with straw and manure, other bushes need special attention.

Hydrangeas (semi-herbaceous) in the South will last out the winter if properly cared for out-of-doors. The tops should be protected with straw or brush. This may be held in place about the bushes with a little manure or stones. The flower buds of the hydrangea from the fall, and this cover will keep them from winter-killing while shielding the bush from winds and sun. In the North this class of hydrangeas must be taken up, planted in tubs and placed in the cellar. This is generally true of latitudes north of Philadelphia.

The shrub known as brugmansia should be treated as is the hydrangea. The brugmansia (known botanically

north, however, they should be treated as follows:

Cut the tops to within 30 inches of the ground. Cover the roots with coarse manure or leaves or similar litter. Hold this in place by brush, which also acts as a protection. Evergreen boughs may be substituted for the coarser litter except in the moist northern regions.

It is best to draw mounds of earth about six or eight inches in height about the base of the rose bushes to keep them from mice. In some localities the loose brush around the roots will attract mice, who will make their winter quarters there and destroy the rose bushes. As an added protection against mice, permit the ground to freeze slightly before winter protection is supplied. In fact, roses should not be protected until after the first light freeze, which may be expected in Washington about the first of December, but earlier farther north.

Climbing Roses.

In the latitude of Philadelphia and farther south climbing roses usually need no protection during the winter unless they are a particularly tender variety. Farther north these roses need protection similar to that given to the tea and hybrid-tea roses.

Climbing roses may be best cared for by being removed from their supports. The branches should then be covered over with a little dirt and treated as hybrid-perpetual roses would be treated. A little fall trim-

will serve. These should be built two and a half or three feet above the floor level. On top of the walls is placed glass sash, making the height from the floor to the eaves five or six feet. The glass for the roof should be 16x24-inch double strength to give a maximum of light and guard against breakage. Ample provision must be made for ventilation.

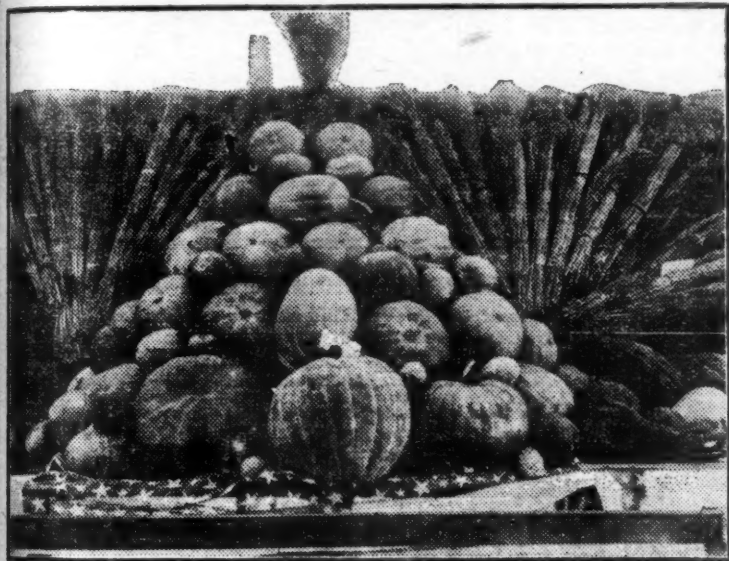
The greenhouse may be heated by the same system used in heating the dwelling or a specially designed heater found on the market may be used. Hot water or steam heat is best for the greenhouse.

Such a greenhouse can be used for several purposes and if properly handled can be made to pay dividends. In addition to furnishing flowers, bedding plants, etc., for the owner, plants

like geraniums, coleus, pansies, asters, tomatoes and cabbage may be grown to supply the demand that will come for such plants in the spring when those living in the neighborhood learn that they can be had. Moreover, the greenhouse furnishes a pleasant place to work during days in the winter when there is little that can be done outside.



FREE To every Boy and Girl. We give a fine camera and complete outfit plates, chemicals etc., with full instructions. Just send your name and address, we send you 20 large art and religious pictures to sell at 10c each. When sold send \$2.00 and the camera and outfit is yours. We give 48 beautiful postcards extra for promptness; also a surprise gift extra for promptness. People's Supply Co., Dept. 87 716 Lucas Ave. St. Louis Mo



A Bountiful Harvest Is Something to Be Thankful For.

as Datura) is also called thorn apple. It is a cultivated form of Jimson weed and has long bell-shaped white flowers and rather coarse foliage.

As a rule shrubs should not be trimmed in the fall. This process is timely immediately after the blossoming period, if this is in the spring, as in the case of the snowball. If the shrubs bloom in the fall, as do some hydrangeas, the rose of Sharon, and some lilacs, they should not be cut directly after blooming, but in the spring of the following year.

The mock orange, which is also known as "syringa," needs no special treatment to help it winter the severe weather. The name "syringa," although popularly applied to the mock orange, is really more appropriate for the lilac, which is known botanically by that designation, while the mock orange is botanically "Philadelphus."

Wintering Rose Bushes.

Almost all kinds of roses are hardy in the vicinities of Washington and St. Louis and to the south of a line drawn between these points. From Washington northward local conditions influence the successful cultivation of certain varieties. Some roses, as the briar and rugosa, need no protection, but other varieties, such as the hybrid-perpetuals, teas, and hybrid-teas, need special care, particularly north of the fortieth parallel. Teas and hybrid-teas hardly succeed in Chicago, although the hybrid-perpetuals grow as far north as Canada. All these classes do well on Long Island and in Boston near the sea when proper care is given them. These varieties in the vicinity of Washington or St. Louis need merely a little manure on the ground to prevent alternate freezing and thawing. Farther

ming might be desirable to lessen the space occupied by the branches on the ground. Such side branches as are not to be needed for next season's blooming may be cut off. Such cutting off and shortening of the ends as would otherwise be done in the spring, may be done in the fall before covering, merely for convenience. This method is much more satisfactory than attempting to put straw about the roses as they remain on their posts or trellises.

BUILD A GREENHOUSE FOR GROWING THINGS IN WINTER.

There are doubtless a large number of people both in the city and country who would enjoy a small greenhouse where they could grow plants during the winter, but who dismiss the thought of building one with the idea that the cost is prohibitive. A small greenhouse, however, can be attached to a dwelling house at comparatively small cost, provided the owner does the work himself.

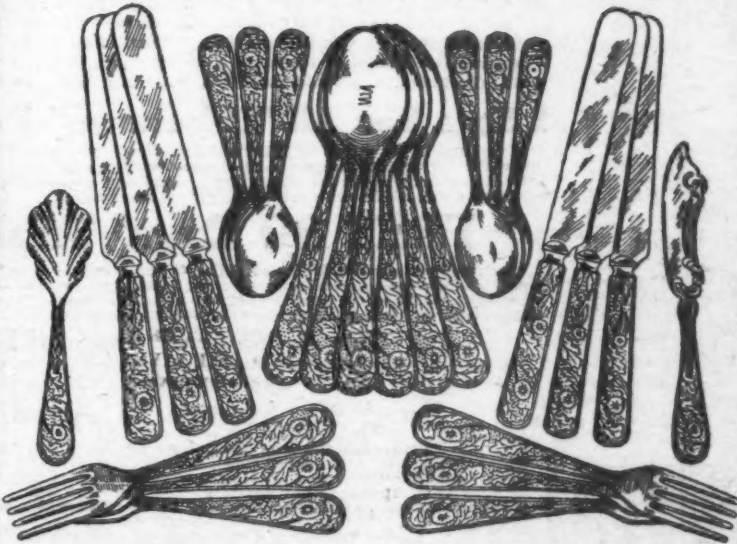
The simplest type of greenhouse is the "lean-to," a shed-like house, which may be attached to the south side of a dwelling or other building. A greenhouse of this kind 10x16 feet will cost for materials \$75 and up. Where second hand material can be secured this figure may be reduced. If wooden construction is used, most of the material can be secured locally, but if the more durable iron construction is wanted, the framework will have to be ordered from one of the greenhouse companies.

In building such a house, the foundation and outside walls are best made of concrete or brick, though board walls with a "dead air space"

Last Call

This Is Positively the Greatest Offer We Have Ever Made. This Electric Silver Set Makes the Best Kind of Christmas Gift. Money Refunded If Set Is Not Better Than We Represent It. Sign the Coupon Below.

26-Piece Electric Silver Set



We Want You to Have a Set of This Silverware

We have in the past made many fine premium offers of silverware to readers of Colman's Rural World, but this is the first time we have ever been able to offer a complete electric silver set on such a liberal offer. And please don't think because we are giving away this splendid set on such liberal terms that it is the ordinary cheap silverware which is plated on a brass base and consequently changes color and has that "brassy" look just as soon as the plating wears off. This set which we offer you here is plated on a white metal base; therefore each and every piece is the same color all the way through and will wear for years. As shown in the above illustration there are 26 pieces in this set—6 Knives, 6 Forks, 6 Teaspoons, 6 Tablespoons, Sugar Shell and Butter Knife. Each piece is full regulation size for family use, the handles are handsomely embossed and decorated with the beautiful Delacy design which is now so popular and the blades of the knives and bowls of the teaspoons and tablespoons are perfectly plain and bright polished.

It is only because we buy this set in large quantities direct from the factory that we are able to secure it at a price that enables us to make the remarkable offer below. It is by far the greatest value we have ever offered. We will send this beautiful 26-Piece Electric Silver Set exactly as illustrated and described to any address upon the terms of the following special offer.

We have sent hundreds of these 26-Piece Electric Silver Sets to our readers, and in every case the subscriber has been delighted beyond measure. We are so sure that this 26-Piece Electric Silver Set will please and satisfy you that we make this offer—and if you are dissatisfied after you get the 26-Piece Electric Silver Set, we will refund your money, or send you another set. You know we couldn't make such an offer unless this 26-Piece is exactly as we represent it.

How To Get This 26-Piece Silver Set Free

Send us a one year's new or renewal subscription to Colman's Rural World and to Farm and Home at our special price of \$1.00, and 25 cents extra to help pay postage and packing charges on the 26-piece Electric Silver Set—total \$1.25, and the complete 26-Piece Silver Set will be sent you by return mail—all charges paid. If you cannot get a new subscription to these two great papers, just send us \$1.25, and we will add a one year's subscription to your own subscription to Colman's Rural World, and in addition send you Farm and Home for one year. This offer may not appear again. Remember, for \$1.25 you get Colman's Rural World one year and Farm and Home one year, and in addition we send you the 26-Piece Electric Silver Set—all charges prepaid. Sign the coupon below today before this offer is withdrawn.

Sign This Coupon Today

Colman's Rural World,
St. Louis, Mo.

Enclosed find \$1.25 to pay for a one year's subscription to Colman's Rural World and to Farm and Home. It is understood that you are to send me the 26-Piece Electric Silver Set—all charges to be prepaid.

Name

P. O. State R. F. D.

ADLER'S Famous No Money Down FREE Trial Offer

I Will Trust
YOU



I Will
Save
You
Half

YOUR OWN Time To Pay
—and
**There's Nothing
To Pay For But Quality**

My Original Direct-from-Factory-to-Home—Not One Cent In Advance—
Free 30 Days' Trial—Nothing to pay for but Quality—Easy Payment Plan
—Revolutionizes Piano and Organ Selling—Absolutely Wipes Out Middle-
men—Banishes ALL Competition—Resulting in the Most Successful Nation-
Wide Sale of Highest Grade Instruments Ever Known.

Read Every Word of My Remarkable Money Saving Plan

You've heard lots of Piano and Organ talk and have doubtless had all kinds of propositions put up to you—but here is the fairest, squarest, most liberal offer ever thought out by any organ maker. Read it! I am the man who made the "Adler" a household word; more than 90,000 of these famous instruments are now in the homes of the people—and when I say there's nothing to pay for but quality when you buy one of my **World Famed Adler Organs—Winners of the highest prize at St. Louis World's Fair—also winners of Gold Medal at National Conservation, Knoxville, Tenn., 1913**—it means a whole lot to you—to your pocket book—in long years of continued service and the satisfaction of the sweetest music ever heard by human ears. It means Rock Bottom prices.

I Save You All "In-Between" Profits

I can and will save you \$48.75 because I sell direct from the \$1,000,000 Adler Organ Factory (greatest in existence) at lowest wholesale factory prices. The Adler Plan thoroughly wrecks organ prices, absolutely sponging out all "in-between," extra, middlemen's profits you pay on other organs.

FREE 30 Days' Trial

I will ship you any **World Famed Adler Organ** you may select from my new, big organ book, for an absolutely free playing test—yes, keep it a whole month free—if it does not prove all I claim—just ship it back to me—I will pay freight both ways and your trial doesn't cost you a single penny.

And Then A 365 Days' Approval Test

—and your money back if my **World Famed Adler Organ** has not held up to every claim I make for it. Isn't this the squarest offer you ever heard of?

Send No Money In Advance

To prove that this is an absolutely free trial, I don't ask you to pay a single penny in advance, because then I would seem to be binding you to some sort of an agreement. I don't want you to agree to anything or to pay anything, until you have had a chance to thoroughly satisfy yourself that my **World Famed Adler Organ** is all that I claim for it—I willingly take all the risk. My **World Famed Adler Organ** must sell itself after a free trial in your home. You're the judge, because it is your money and I can not afford to have a single dissatisfied customer.



Easy Payments—No Burden To You

No Interest to Pay—No Collectors to Bother You

My Adler System of credit makes it possible for anyone, no matter how limited their income, to own a **World Famed Adler Organ**. The payments are so small you will hardly miss them, and I charge no interest on deferred payments. After you have decided to keep my **World Famed Adler Organ** you can pay once a month—every three months or every six months. Ask about our easy Payment Plan for those who depend upon their crops for income.

The Adler 50 Year Guarantee

It is the biggest, best and strongest guarantee ever put on any musical instrument—and is beyond all doubt the crowning climax of the most liberal offer ever made by a responsible organ manufacturer.

Every **World Famed Adler Organ** sold is accompanied by our 50 year Legal Guarantee Bond. The Adler Guarantee is backed by the Adler Capital and Resources of over \$1,000,000.

Send Today For My Free Wonderful Organ Book And Money Saving Plan

It costs you nothing to find out how much better my **World Famed Prize Winning Adler Organs** are than the ordinary made-to-sell organs. Just fill in the coupon below and mail it me. No matter whether you are thinking of buying an instrument now or sometime in the future, you will want my big handsomely illustrated Organ Book and to know all about the fairest, squarest, most liberal, most convenient Organ buying proposition you ever heard of.

My Celebrated ADLER Piano Offer

The Greatest Ever Made By Any Piano Maker

My **Celebrated Adler Piano** is better than pianos that sell for double the money. I let you have your piano on exactly the same plan as the Adler Organ—30 days' free trial—all the time you want in which to pay—money back at the end of a year if the piano is not exactly as represented.

25-Year Guarantee The longest guarantee given by any other maker of pianos is 12 years—less than half my guarantee. Nearly all the others guarantee for only 10 years. Remember my guarantee is for a quarter of a century. The heavily constructed back frame of my **Celebrated Adler Piano** is built to withstand a constant strain of 20 tons. I guarantee this! That's one reason why my piano—by actual test—stays in tune longer than pianos for which the dealers charge twice the price. I guarantee this also.

FILL IN AND MAIL THIS COUPON TODAY

CYRUS L. ADLER, President

Adler Manufacturing Company

5304 W. Chestnut Street, Louisville, Ky.

Not One Red Cent to Pay In Advance!

All the time you want in which to pay!

Payments Extended when you can't pay!

50-year guarantee on Adler Organs!

25-year guarantee on Adler Pianos!

I give you—Proof before you buy,

Protection when you buy,

Satisfaction after you buy.

I Sell Only Direct From Factory To Your Home.

The Famous \$1,000,000 ADLER Factory—Greatest in World



Cyrus L. Adler, Pres., Adler Manufacturing Co., 5304 Chestnut St., Louisville, Ky.

Make a cross in the square for organ or pianos—or both. Or write your name and address on a postal card or in a letter, stating which you want—piano or organ literature. Don't enclose any stamp. I pay all charges. Write plainly.

☐ I want your Organ Book, prices, terms, etc. ☐ I want piano literature, prices, terms, etc., on post paid.

NAME.....

ADDRESS.....

COUNTY..... STATE.....

